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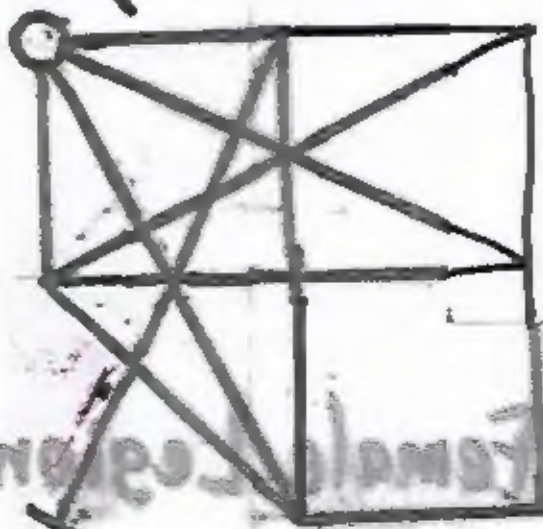
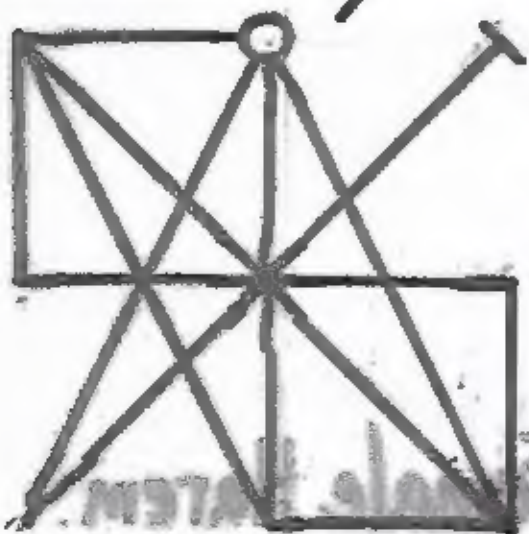
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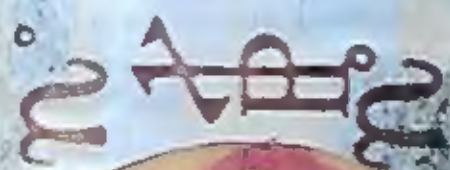




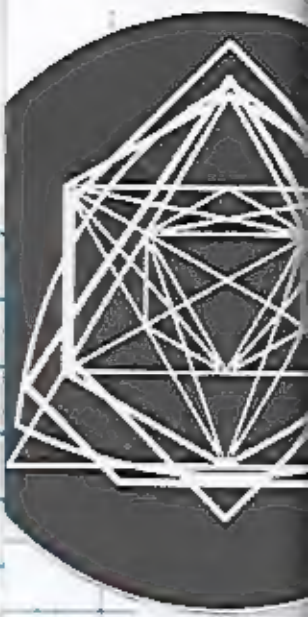


# THE GRAND GRIMOIRE OF MAGIC.

*The art of commanding spirits,  
Celestial & Infernal alike,  
with many other secrets  
of the Magical Art.*

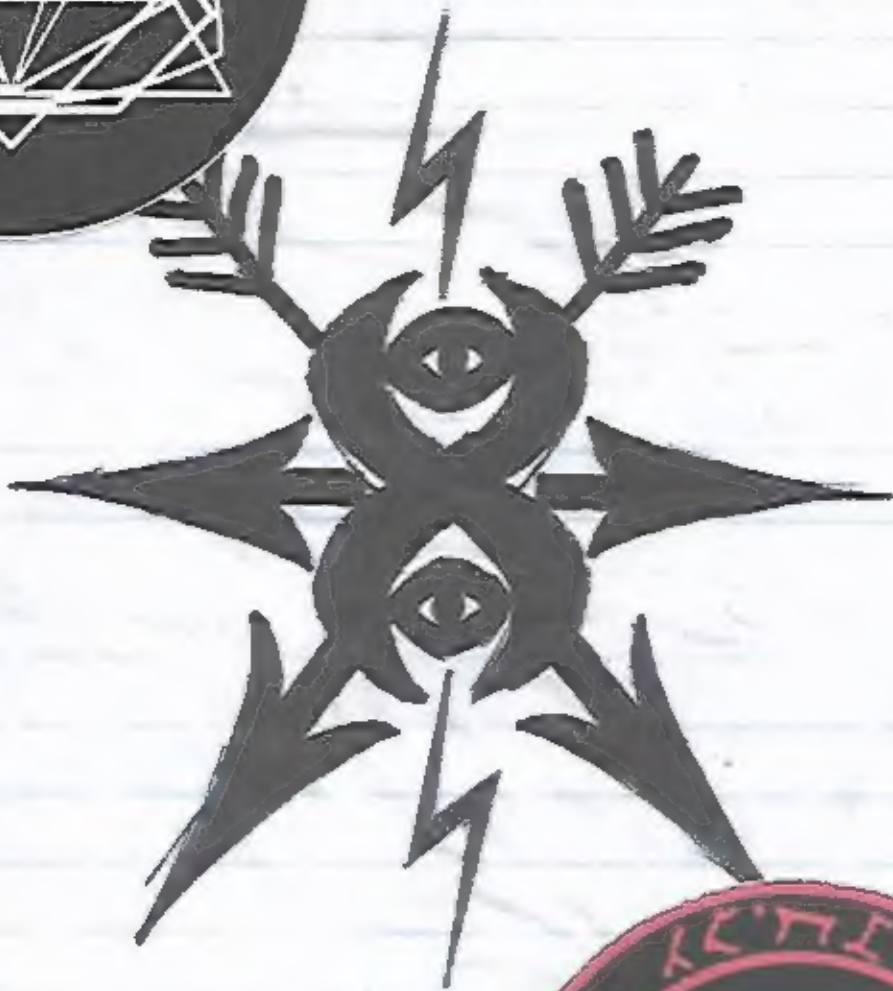
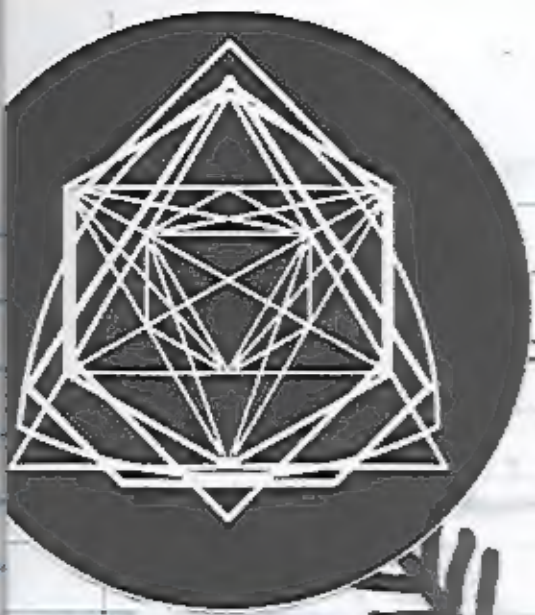






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The Red Dragon





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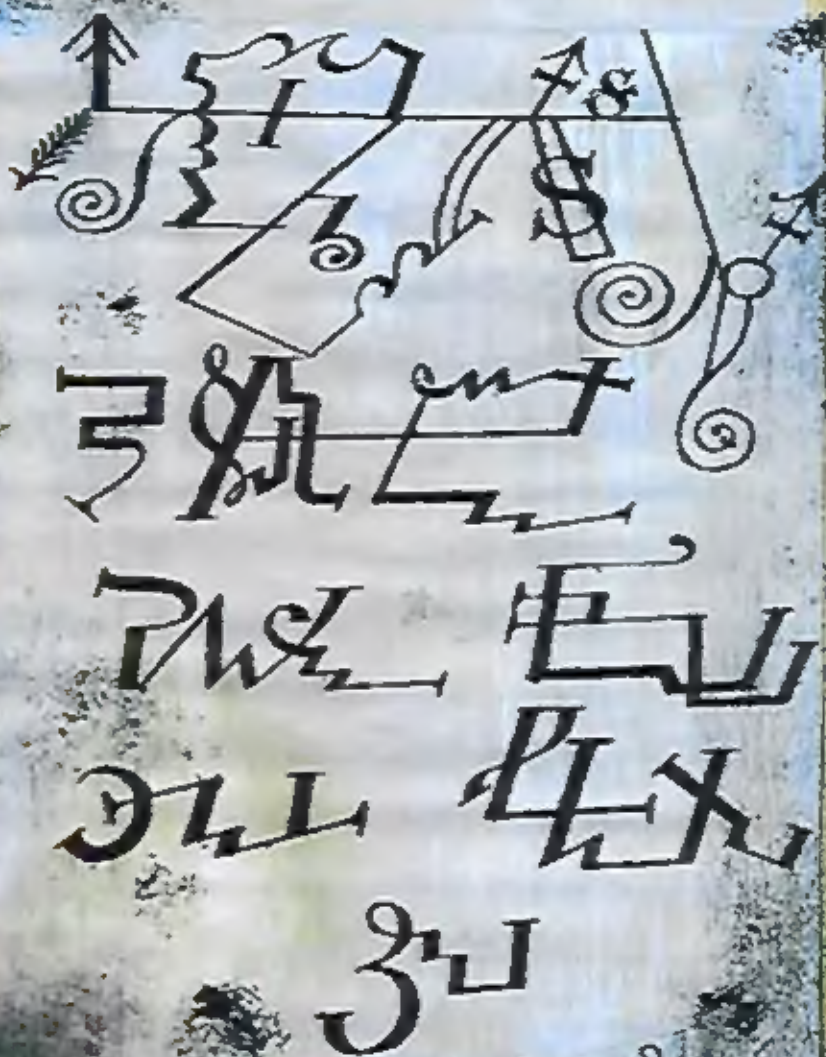
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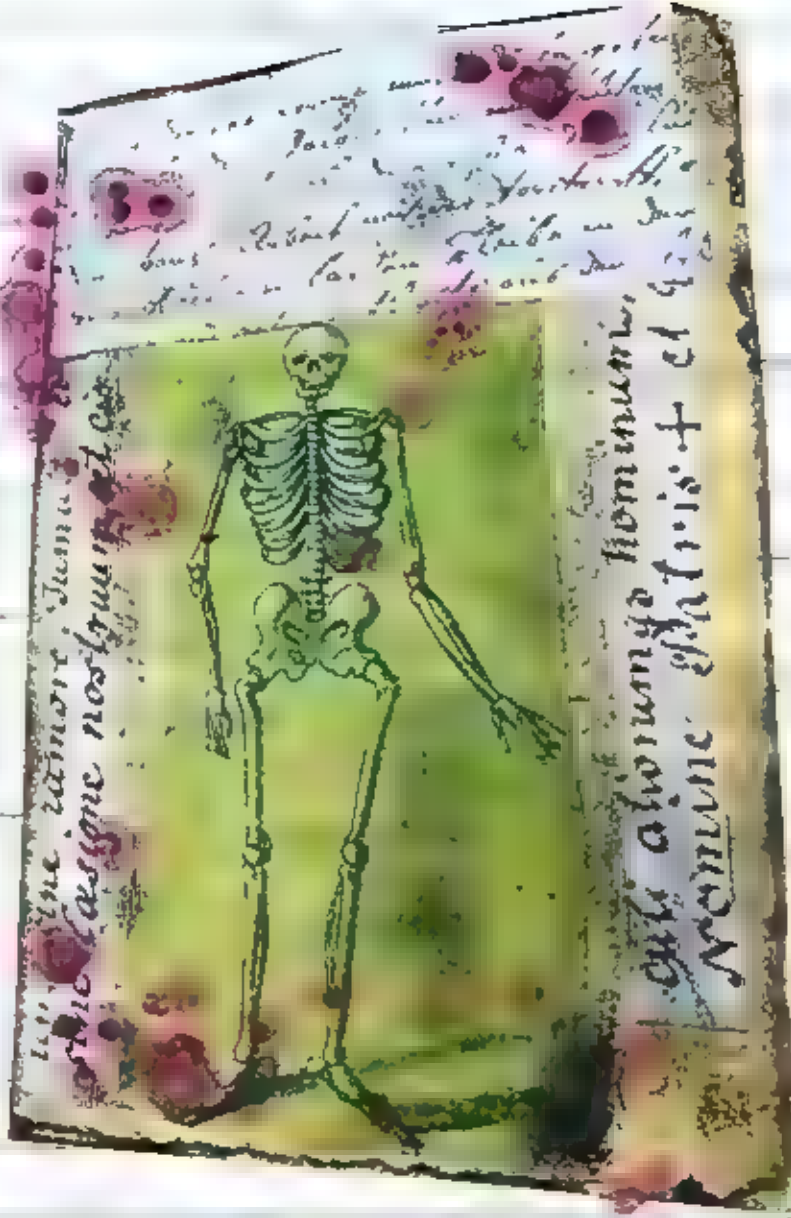




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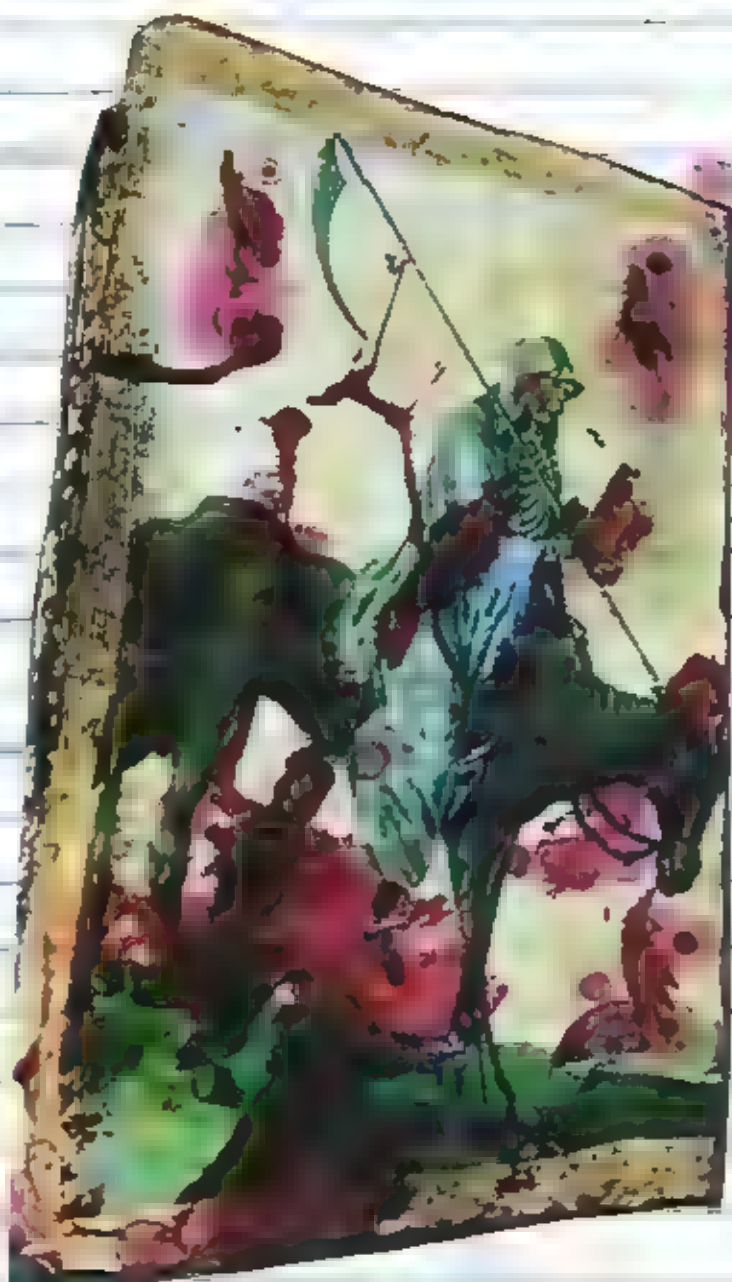
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### Von den Lacomanten

Der ist ein Spiegel in dem  
 zu sehen ein unglückseliges Kind  
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 der ihm einen Spiegel  
 in dem man sehen  
 kann ein böses  
 Kind. In dem Spiegel  
 sieht man ein  
 böses Kind.





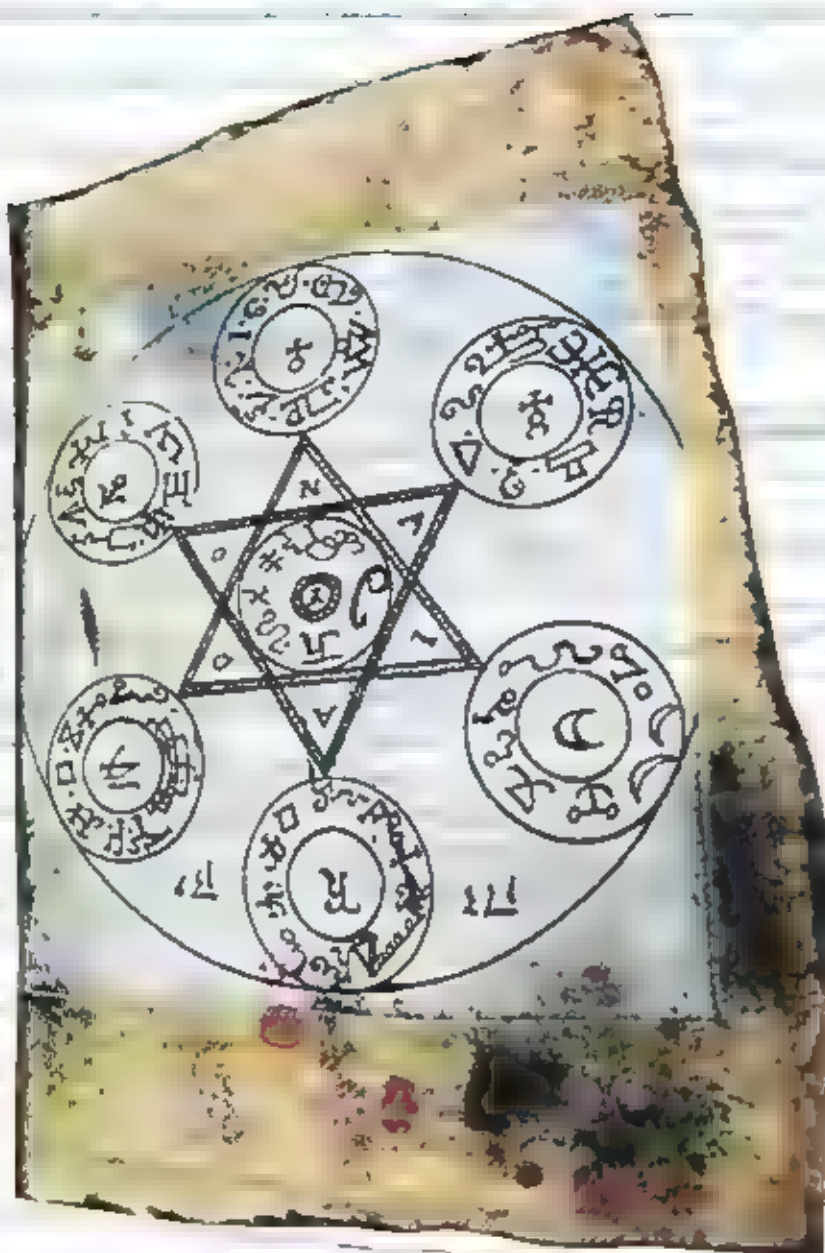


Ein für alle Zeiten  
dieser Welt und der  
Königliche Dinst Gerecht  
...



282507-1A8











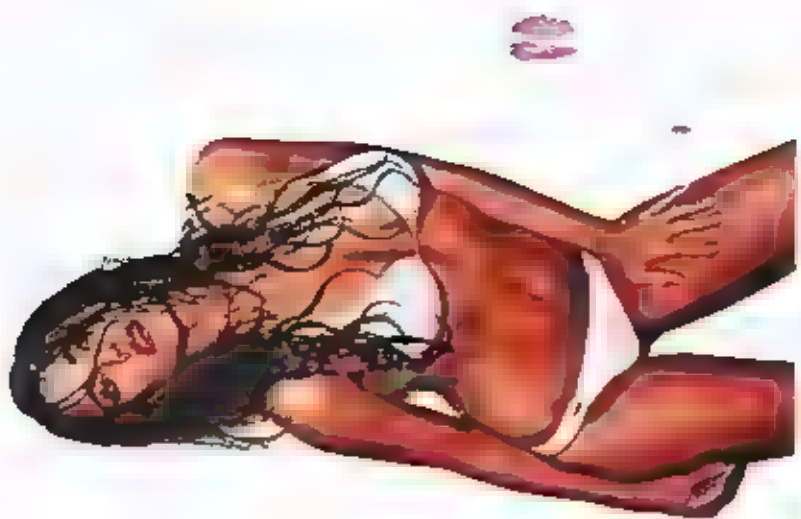
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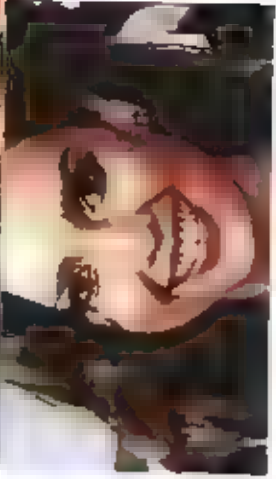
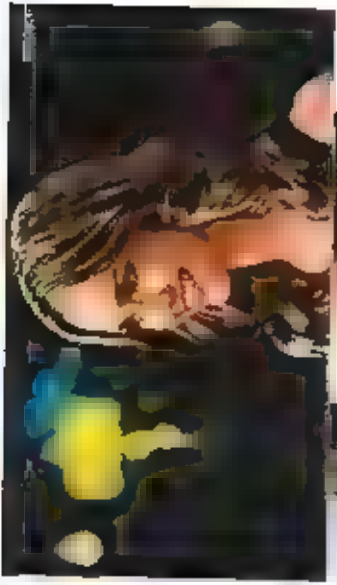






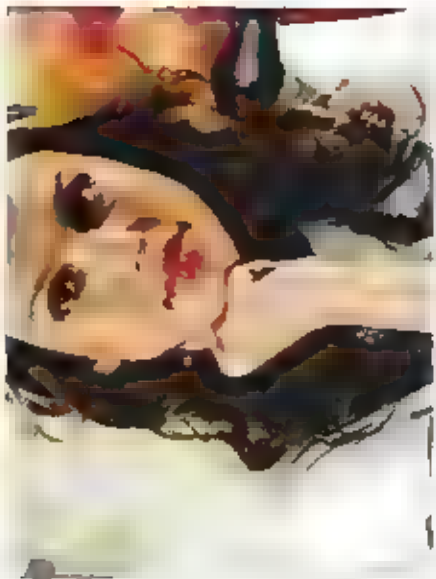


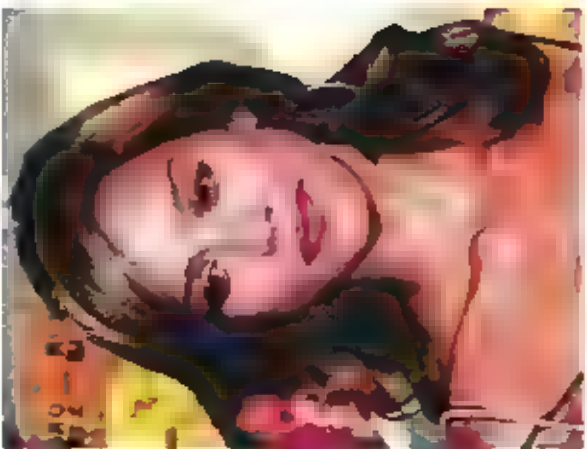
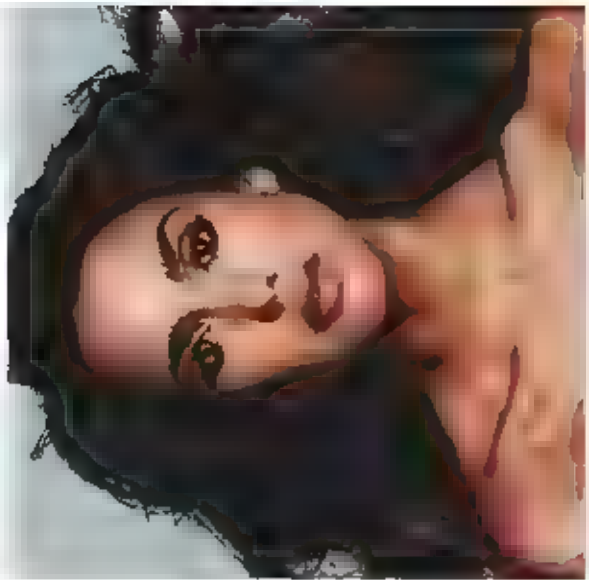




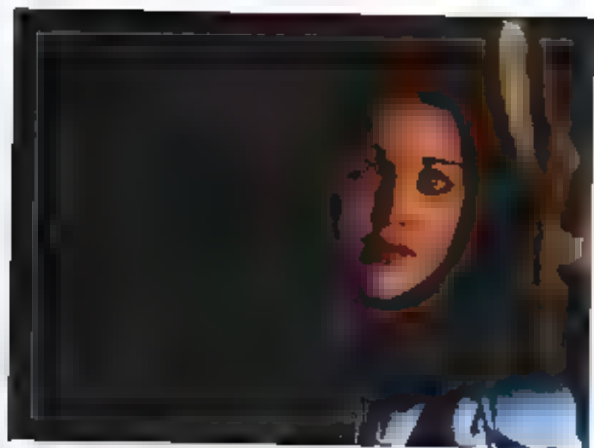






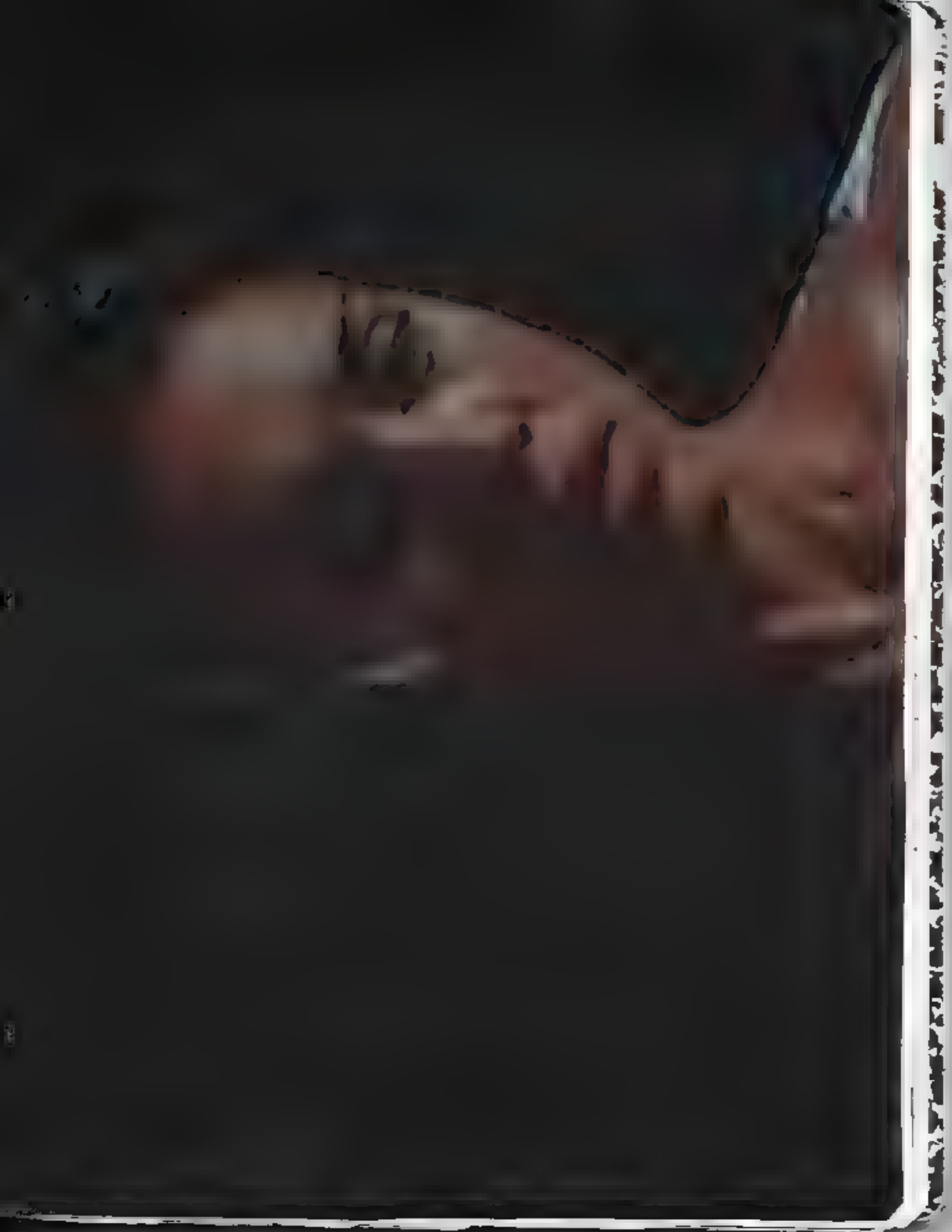






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4154 号: 2014.12.10

電話: 03-5681-1111 傳真: 03-5681-1112

「自由之子」是美國之國歌，「自由之子」也為自由黨。

● 25 岁

2015年12月15日

1946年10月1日，国民党政府接收了北平，结束了日本对北平的统治。

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THE UNIVERSITY OF CHICAGO PRESS

December 1994

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http://dx.doi.org/10.5142477.A

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| Category                 | Item                         | Value                           |
|--------------------------|------------------------------|---------------------------------|
| A. General Information   | 1. Name                      | John Doe                        |
|                          | 2. Address                   | 123 Main St, New York, NY 10001 |
|                          | 3. Phone Number              | (212) 555-1234                  |
|                          | 4. Email Address             | john.doe@example.com            |
|                          | 5. Date of Birth             | 01/01/1980                      |
|                          | 6. Gender                    | Male                            |
|                          | 7. Marital Status            | Single                          |
|                          | 8. Education Level           | High School Graduate            |
|                          | 9. Current Occupation        | Software Engineer               |
|                          | 10. Years of Experience      | 5                               |
| B. Financial Information | 11. Annual Income            | \$75,000                        |
|                          | 12. Monthly Expenses         | \$2,500                         |
|                          | 13. Savings Rate             | 10%                             |
|                          | 14. Debt-to-Income Ratio     | 0.25                            |
|                          | 15. Credit Score             | 720                             |
|                          | 16. Current Assets           | \$15,000                        |
|                          | 17. Current Liabilities      | \$5,000                         |
|                          | 18. Net Worth                | \$10,000                        |
|                          | 19. Investment Portfolio     | Stocks, Bonds, Mutual Funds     |
|                          | 20. Risk Tolerance           | Medium                          |
| C. Personal Interests    | 21. Hobbies                  | Reading, Hiking, Gardening      |
|                          | 22. Favorite Sports          | Baseball, Soccer                |
|                          | 23. Travel Preferences       | Domestic, International         |
|                          | 24. Preferred Vacation Spots | Beach, Mountains                |
|                          | 25. Favorite Foods           | Italian, Mexican                |
|                          | 26. Preferred Music Genres   | Rock, Pop                       |
|                          | 27. Favorite TV Shows        | Netflix, HBO                    |
|                          | 28. Preferred Car Model      | Sedan                           |
|                          | 29. Preferred Pet Type       | Dog                             |
|                          | 30. Preferred Color          | Blue                            |

1. *Phragmites australis* (Cav.) Trin. ex Steud.

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დავით ბაგრატიონი

**THE UNIVERSITY OF CHICAGO**

[illegible][illegible]

2014年12月15日

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WJF: 02-05-2006

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Figure 1. The effect of the concentration of the polymer on the gelation time of the polymer solution.

1997年12月

1970年7月26日。1970年8月1日。

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[illegible][illegible]

사실은 이렇다. 1970년대 이후에 이르러서야 비로소 이 문제를 본격적으로 다룬다. 이 시기에 이르러서야 이 문제를 본격적으로 다룬다.

1994年12月10日

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains.

1940年12月25日，在柏林，希特勒向德意志人民发表演说，宣布德国已赢得战争胜利。

2006年12月31日

“我从小就喜欢音乐，在小学时，我就参加了学校的音乐队，那时我就开始学习钢琴。后来，我考入了中央音乐学院附中，继续学习钢琴。在附中期间，我不仅学习了钢琴，还学习了作曲和音乐理论。毕业后，我考入了中央音乐学院，继续深造。在学院期间，我参加了许多比赛，获得了许多奖项。毕业后，我进入了一家音乐公司工作，负责策划和推广音乐作品。在工作中，我积累了丰富的经验，也结识了许多音乐界的朋友。现在，我是一名自由职业者，主要从事音乐创作和演出。我希望通过我的音乐，给大家带来快乐和感动。”

2000年12月26日

1990年 2月 25日 星期一

1. The first step is to identify the problem or question that needs to be answered.

1997年12月1日 星期一 晴 12月1日 星期一 晴





□ **අනුමැතිය ලබා, නිකුත් කිරීම:** මහ නිලධාරී මු. පරිසරය පැවැත්වීමේදී සහභාගීත්වය දැක්වීමේදී සහ සහභාගී  
දැක්වීම.

Είναι ένας άνθρωπος και συγγραφέας. Δεν έχει τίποτα από τις συζητινιές, τους φιλοδοξούντες, όμοιο ή διαφορετικό μιας δημοκρατικής κοινωνίας.

Το 1990, οπότε και η ΕΡΕΥΝΑ ΕΚΠΕΔΕΥΣΕΩΣ ΕΚΤΕΛΕΣΤΗΚΕ, Η ΕΠΙΣΤΗΜΟΝΙΚΗ ΚΑΙ ΤΕΧΝΟΛΟΓΙΚΗ ΕΞΕΛΙΞΗ ΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ ΕΠΙΤΡΕΠΕ ΣΤΟΝ ΕΛΛΗΝΙΚΟ ΛΟΓΟΤΥΠΟ ΝΑ ΕΠΙΣΤΡΕΨΕΙ ΣΤΟΝ ΚΛΑΣΙΚΟ ΤΥΠΟ ΤΗΣ ΕΚΔΟΣΗΣ ΤΩΝ ΒΙΒΛΙΩΝ. Η ΕΠΙΣΤΗΜΟΝΙΚΗ ΚΑΙ ΤΕΧΝΟΛΟΓΙΚΗ ΕΞΕΛΙΞΗ ΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ ΕΠΙΤΡΕΠΕ ΣΤΟΝ ΕΛΛΗΝΙΚΟ ΛΟΓΟΤΥΠΟ ΝΑ ΕΠΙΣΤΡΕΨΕΙ ΣΤΟΝ ΚΛΑΣΙΚΟ ΤΥΠΟ ΤΗΣ ΕΚΔΟΣΗΣ ΤΩΝ ΒΙΒΛΙΩΝ. Η ΕΠΙΣΤΗΜΟΝΙΚΗ ΚΑΙ ΤΕΧΝΟΛΟΓΙΚΗ ΕΞΕΛΙΞΗ ΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ ΕΠΙΤΡΕΠΕ ΣΤΟΝ ΕΛΛΗΝΙΚΟ ΛΟΓΟΤΥΠΟ ΝΑ ΕΠΙΣΤΡΕΨΕΙ ΣΤΟΝ ΚΛΑΣΙΚΟ ΤΥΠΟ ΤΗΣ ΕΚΔΟΣΗΣ ΤΩΝ ΒΙΒΛΙΩΝ.

Καί, ίσως να μένει ακόμα όποιο πρόβλημα να δοθεί από τους αρμόδιους. Όμως, και αυτό, είναι σημαντικό να μην ξεχνάμε, ότι η αντιμετώπιση των προβλημάτων είναι από τις προτεραιότητες της πολιτικής μας.

ΕΠΙΣΗΜΑΝΕΤΕ ΟΤΙ ΤΟΙΣ ΔΕΥΤΕΡΟΒΑΘΜΙΟΥ ΜΕΣΟΥ ΚΑΙ ΜΕ ΧΑΡΑΚΤΗΡΙΣΤΙΚΑ ΤΗΣ ΣΥΜΠΕΡΙΦΕΡΑΣ ΤΗΣ ΕΡΕΥΡΑΣ  
ΜΠΛΟΚΑΡΙΣΤΕ ΤΟΝ ΚΑΙ ΔΕΙΝΟ ΕΥΣΤΑΘΕΙ ΟΜΟΙΟΤΗΤΑ ΜΕΤΑΦΟΡΕΣ

Տեղեւորութիւնները արդիւնք տալով մանկի/տղամանկ, անտղամանկութեան և ծննդաբանական խնդիրներ:

THE UNIVERSITY OF TEXAS AT AUSTIN

Die nächste Übung besteht aus drei Teilen: Motivationsübung

உணவுப் பிழைப்பு, உயிரினங்கள், வாழிடங்கள், உயிர்வாழ்வு

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Εάν έχετε οποιαδήποτε υπόθεση σχετικά με τη λειτουργία του συστήματός μας, το μέγιστο διάστημα της διάρκειας απάντησής μας

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Το άρθρο να είναι γιγαντιαίο και να μετατρέπεται στα επόμενα χρόνια

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και είναι πρόθυγος να δώσει τον αριθμό του στη βάση του οποίου να γίνει η επόμενη κλήρωση.

Η επιβίβαση της δοθίνου αφοσιώνει στο φαινόμενο

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ΛΕΥΤΟ ΤΟ ΣΤΑΘΙΣ ΜΕΛΟΣ ΚΑΙ ΟΥΚ ΕΙΣΗΛΕΥΟΜΕΝΟΣ ΣΥΝΤΑΚΤΕΥΣ

որման հարյուրիկ, արտաքին պատրաստի, արտեր

1990-1991, 1992-1993, 1994-1995, 1996-1997, 1998-1999, 2000-2001, 2002-2003, 2004-2005, 2006-2007, 2008-2009, 2010-2011, 2012-2013, 2014-2015, 2016-2017, 2018-2019, 2020-2021, 2022-2023, 2024-2025, 2026-2027, 2028-2029, 2030-2031, 2032-2033, 2034-2035, 2036-2037, 2038-2039, 2040-2041, 2042-2043, 2044-2045, 2046-2047, 2048-2049, 2050-2051, 2052-2053, 2054-2055, 2056-2057, 2058-2059, 2060-2061, 2062-2063, 2064-2065, 2066-2067, 2068-2069, 2070-2071, 2072-2073, 2074-2075, 2076-2077, 2078-2079, 2080-2081, 2082-2083, 2084-2085, 2086-2087, 2088-2089, 2090-2091, 2092-2093, 2094-2095, 2096-2097, 2098-2099, 2100-2101, 2102-2103, 2104-2105, 2106-2107, 2108-2109, 2110-2111, 2112-2113, 2114-2115, 2116-2117, 2118-2119, 2120-2121, 2122-2123, 2124-2125, 2126-2127, 2128-2129, 2130-2131, 2132-2133, 2134-2135, 2136-2137, 2138-2139, 2140-2141, 2142-2143, 2144-2145, 2146-2147, 2148-2149, 2150-2151, 2152-2153, 2154-2155, 2156-2157, 2158-2159, 2160-2161, 2162-2163, 2164-2165, 2166-2167, 2168-2169, 2170-2171, 2172-2173, 2174-2175, 2176-2177, 2178-2179, 2180-2181, 2182-2183, 2184-2185, 2186-2187, 2188-2189, 2190-2191, 2192-2193, 2194-2195, 2196-2197, 2198-2199, 2200-2201, 2202-2203, 2204-2205, 2206-2207, 2208-2209, 2210-2211, 2212-2213, 2214-2215, 2216-2217, 2218-2219, 2220-2221, 2222-2223, 2224-2225, 2226-2227, 2228-2229, 2230-2231, 2232-2233, 2234-2235, 2236-2237, 2238-2239, 2240-2241, 2242-2243, 2244-2245, 2246-2247, 2248-2249, 2250-2251, 2252-2253, 2254-2255, 2256-2257, 2258-2259, 2260-2261, 2262-2263, 2264-2265, 2266-2267, 2268-2269, 2270-2271, 2272-2273, 2274-2275, 2276-2277, 2278-2279, 2280-2281, 2282-2283, 2284-2285, 2286-2287, 2288-2289, 2290-2291, 2292-2293, 2294-2295, 2296-2297, 2298-2299, 2300-2301, 2302-2303, 2304-2305, 2306-2307, 2308-2309, 2310-2311, 2312-2313, 2314-2315, 2316-2317, 2318-2319, 2320-2321, 2322-2323, 2324-2325, 2326-2327, 2328-2329, 2330-2331, 2332-2333, 2334-2335, 2336-2337, 2338-2339, 2340-2341, 2342-2343, 2344-2345, 2346-2347, 2348-2349, 2350-2351, 2352-2353, 2354-2355, 2356-2357, 2358-2359, 2360-2361, 2362-2363, 2364-2365, 2366-2367, 2368-2369, 2370-2371, 2372-2373, 2374-2375, 2376-2377, 2378-2379, 2380-2381, 2382-2383, 2384-2385, 2386-2387, 2388-2389, 2390-2391, 2392-2393, 2394-2395, 2396-2397, 2398-2399, 2400-2401, 2402-2403, 2404-2405, 2406-2407, 2408-2409, 2410-2411, 2412-2413, 2414-2415, 2416-2417, 2418-2419, 2420-2421, 2422-2423, 2424-2425, 2426-2427, 2428-2429, 2430-2431, 2432-2433, 2434-2435, 2436-2437, 2438-2439, 2440-2441, 2442-2443, 2444-2445, 2446-2447, 2448-2449, 2450-2451, 2452-2453, 2454-2455, 2456-2457, 2458-2459, 2460-2461, 2462-2463, 2464-2465, 2466-2467, 2468-2469, 2470-2471, 2472-2473, 2474-2475, 2476-2477, 2478-2479, 2480-2481, 2482-2483, 2484-2485, 2486-2487, 2488-2489, 2490-2491, 2492-2493, 2494-2495, 2496-2497, 2498-2499, 2500-2501, 2502-2503, 2504-2505, 2506-2507, 2508-2509, 2510-2511, 2512-2513, 2514-2515, 2516-2517, 2518-2519, 2520-2521, 2522-2523, 2524-2525, 2526-2527, 2528-2529, 2530-2531, 2532-2533, 2534-2535, 2536-2537, 2538-2539, 2540-2541, 2542-2543, 2544-2545, 2546-2547, 2548-2549, 2550-2551, 2552-2553, 2554-2555, 2556-2557, 2558-2559, 2560-2561, 2562-2563, 2564-2565, 2566-2567, 2568-2569, 2570-2571, 2572-2573, 2574-2575, 2576-2577, 2578-2579, 2580-2581, 2582-2583, 2584-2585, 2586-2587, 2588-2589, 2590-2591, 2592-2593, 2594-2595, 2596-2597, 2598-2599, 2600-2601, 2602-2603, 2604-2605, 2606-2607, 2608-2609, 2610-2611, 2612-2613, 2614-2615, 2616-2617, 2618-2619, 2620-2621, 2622-2623, 2624-2625, 2626-2627, 2628-2629, 2630-2631, 2632-2633, 2634-2635, 2636-2637, 2638-2639, 2640-2641, 2642-2643, 2644-2645, 2646-2647, 2648-2649, 2650-2651, 2652-2653, 2654-2655, 2656-2657, 2658-2659, 2660-2661, 2662-2663, 2664-2665, 2666-2667, 2668-2669, 2670-2671, 2672-2673, 2674-2675, 2676-2677, 2678-2679, 2680-2681, 2682-2683, 2684-2685, 2686-2687, 2688-2689, 2690-2691, 2692-2693, 2694-2695, 2696-2697, 2698-2699, 2700-2701, 2702-2703, 2704-2705, 2706-2707, 2708-2709, 2710-2711, 2712-2713, 2714-2715, 2716-2717, 2718-2719, 2720-2721, 2722-2723, 2724-2725, 2726-2727, 2728-2729, 2730-2731, 2732-2733, 27

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Beatrice



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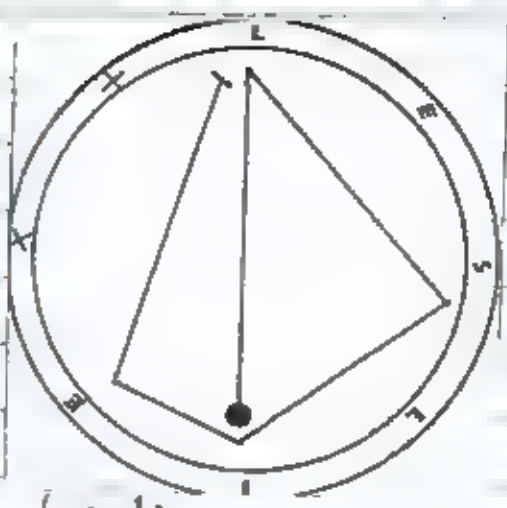
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Carmen



Korina



Leslie



Natalie

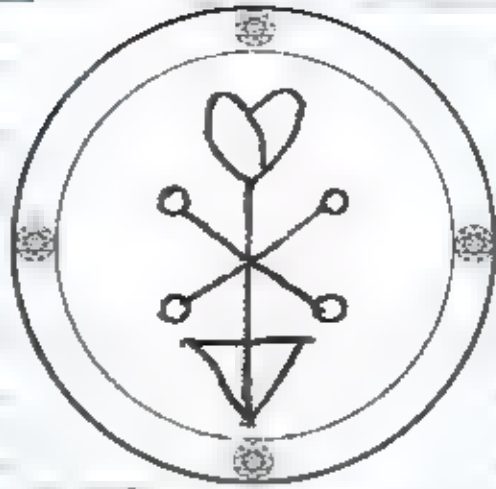


Ronnie

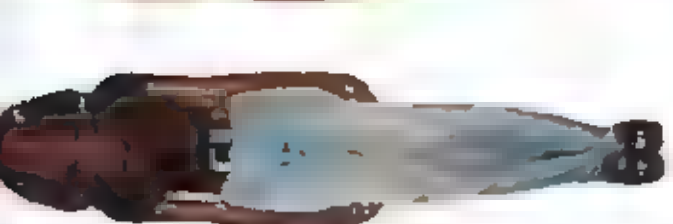
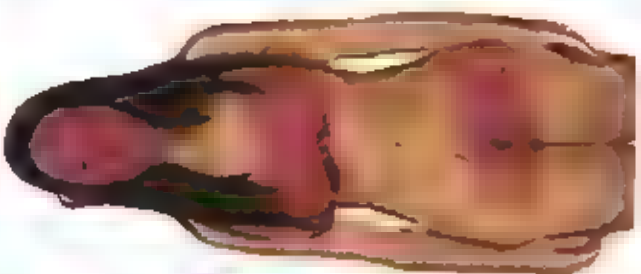
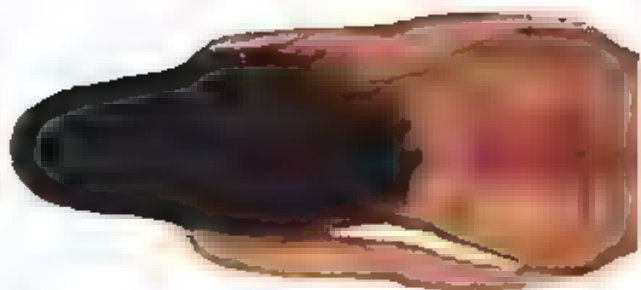


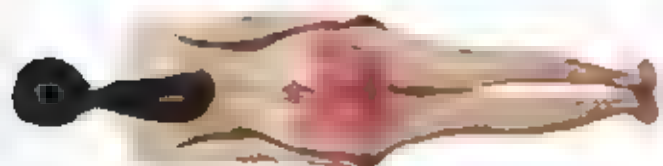
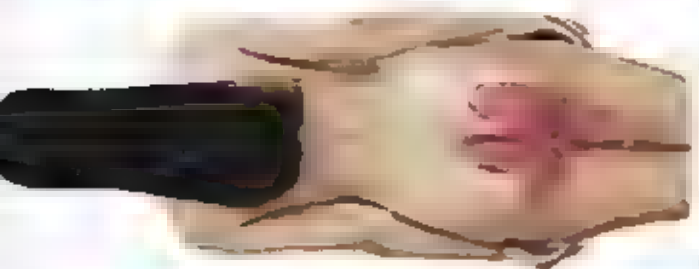


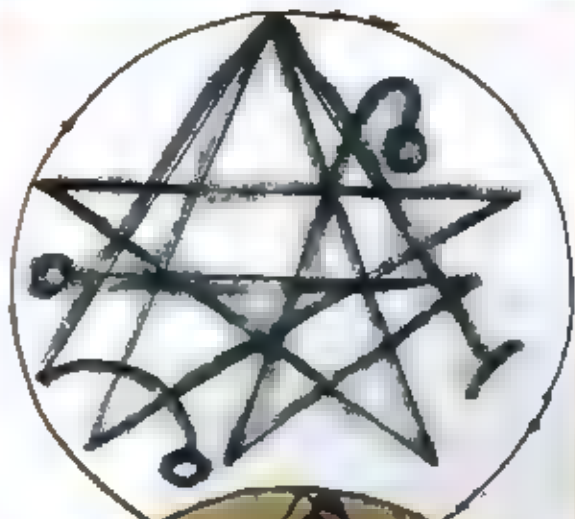
Tiffany



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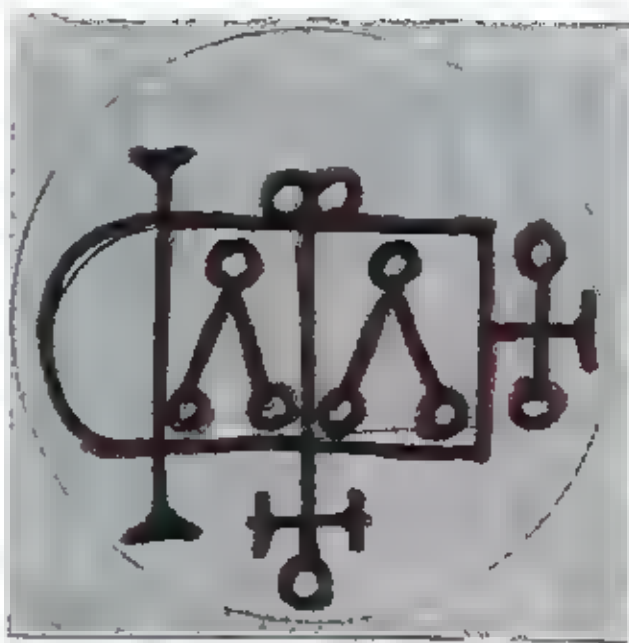
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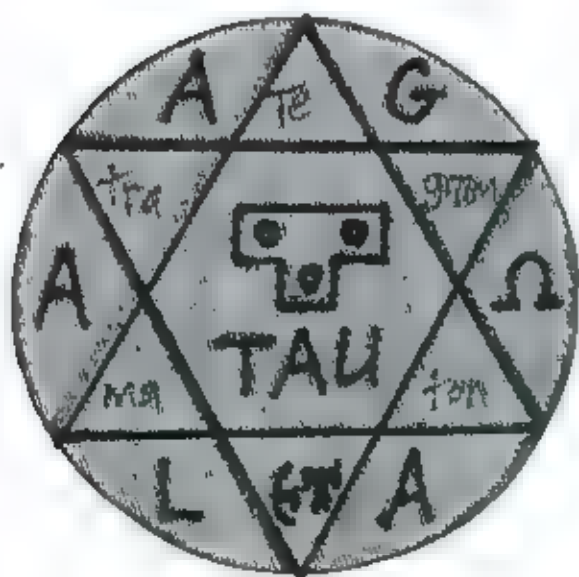
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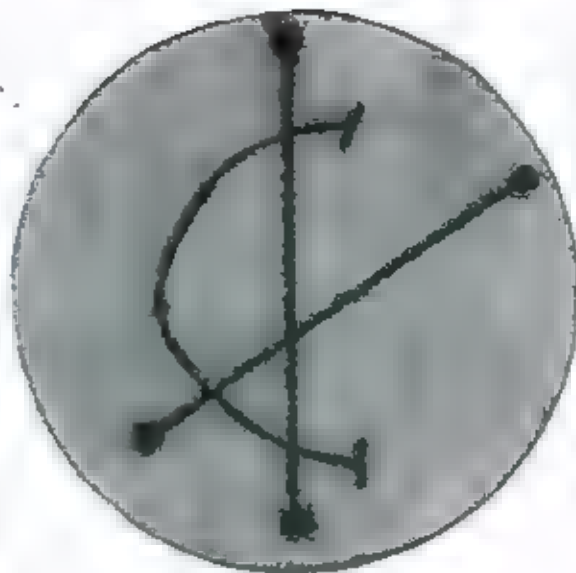


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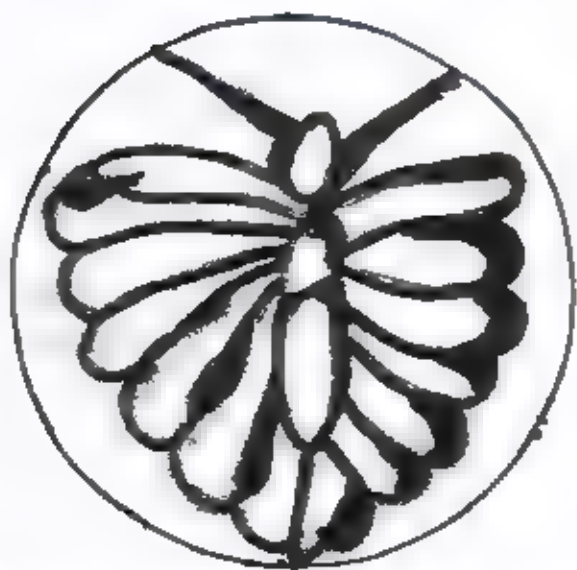


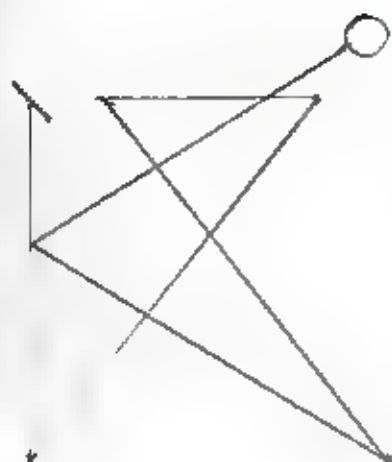






Duchess Bane the Money  
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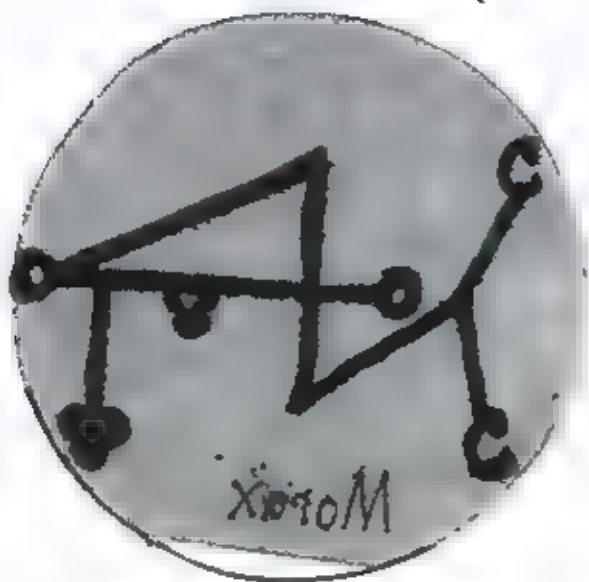
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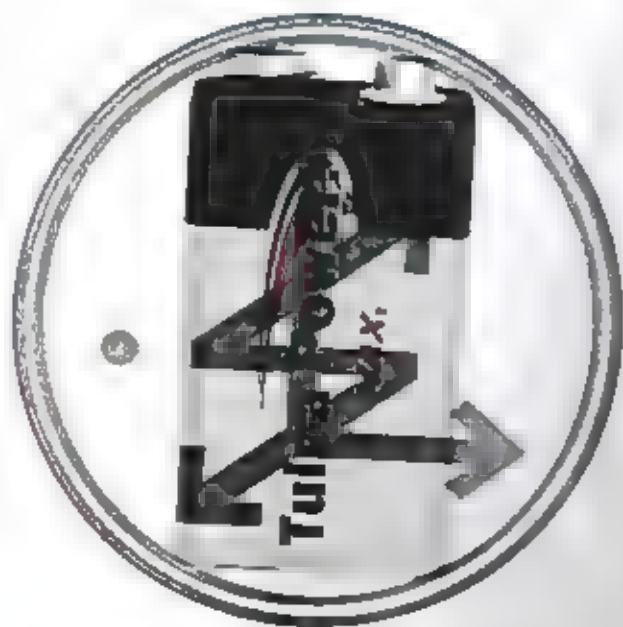
Second Kingdom of Flames

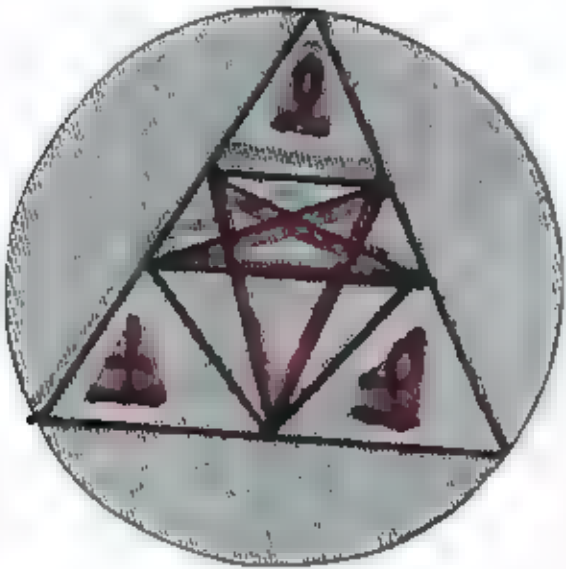
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Second Kingdom of Flames









98765432109876543210

Nades, Suradis, Mariner, Sader,

Maxine "Max" Guevara

Maxine (Max)

Age: Early twenties

Gender: Female

Nickname: "Dark Angel"

Sensual, Sexy, Strong, Sweet

Function: Person's Companion, Sexual Partner

Kelva Ki Qum Vel Tuat'ah Vemek Tu Asta Malkai

Prostas,  
Solaster



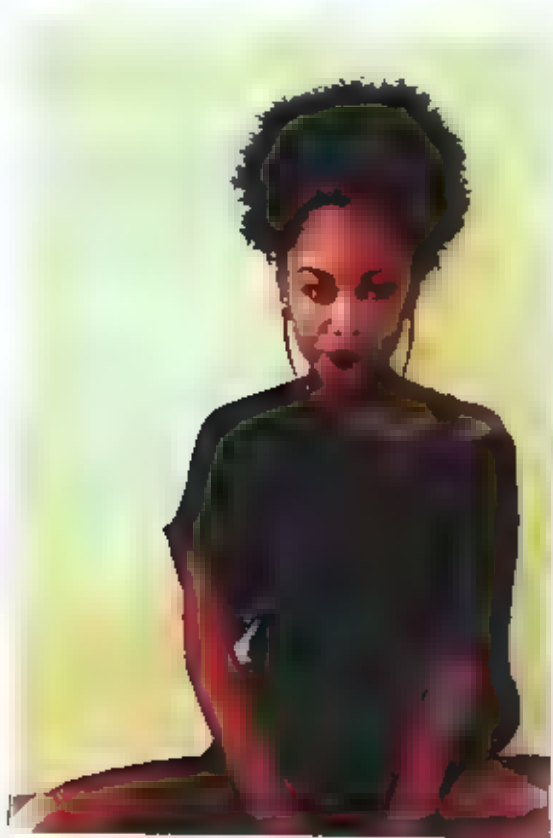
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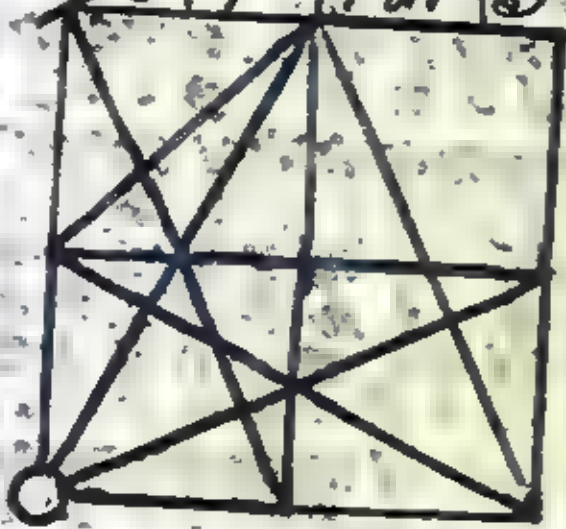








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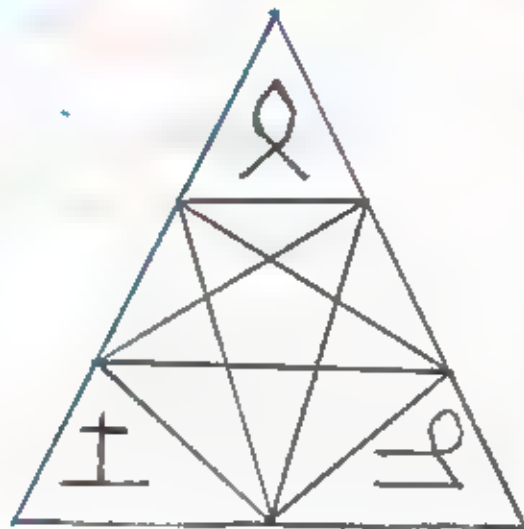




Aoth, Abaoth, Basym, Isck



Sabaoth, IAO NAH-KAH EE-AH



-OH-EH "I open the way"

# Androids: Various Notes etc.

Bridgette looked vaguely like the blond actress in an old movie that she was named after. Ruby lipstick covered her pouty lips and she wore mascara over her pale green eyes. Her busty, unbelievably gravity-defying breasts looked like they would explode out of her glamorous red sequined cocktail dress backless and low-cut, along with high heels. She looked like she stepped straight out of a porno.

## **Bridgette Body Stats:**

Age (in appearance): 28

Height: 5'8" (173 cm) Weight: 160 lbs (72.5 kg)

Eye Color: Pale-Green

Feet/Shoe Size: 8 (US)

Hair Color: Blond

Body type: hourglass

Skin: Pale complexion

Dress Size: 6

Figure Measurements: Bust = 38 | Bra = 32-DD (32-E) | Waist = 28 | Hips = 36

Heritage/Ethnicity/Race: Considered Caucasian

Hometown: Factory

Melissa, Carmen and Tiffany were dressed in skimpy cheerleader outfits. They were more toned and athletic with full breasts. They were far too perfect to be human, if only by virtue of the fact that they were so well-groomed. Their flowing manes had nary a split end, their flawless bronzed skin

## **Carmen Body Stats**

Age (in appearance): 28

Height: 5'8" (173 cm) Weight: 130 lbs (59 kg)

Eye Color: Greyish-Blue

Feet/Shoe Size: 8 (US)

Hair Color: Black

Body type: hourglass toned/athletic

Skin: Pale complexion

Dress Size: 6

Figure Measurements: Bust = 34 | Bra = 36-D | Waist = 24 | Hips = 36

Heritage/Ethnicity/Race: Considered Caucasian

Hometown: Factory

## **Melissa/Tiffany Body Stats.**

Age (in appearance): 25

Height: 5'8" (173 cm) Weight: 143 lbs (65 kg)

Eye Color: Greyish-Blue

Feet/Shoe Size: 8 (US)



Hair Color: Blond (Melissa), Brown (Tiffany)

Body type: hourglass toned/athletic

Skin: Bronzed complexion

Dress Size: 8

Figure Measurements: Bust = 38 | Bra = 34-D | Waist = 28 | Hips = 36 (97-70-91 cm)

Heritage/Ethnicity/Race: Considered Caucasian

Hometown: Factory

Erica was statuesque, built to be a fashion model. She had on a silver skintight jumpsuit.

#### **E.R.I.C.A. Body Stats:**

Age (in appearance): 26

Height: 6'0" (183 cm) | Weight: 130 lbs (59 kg)

Eye Color: Black

Feet/Shoe Size: 12 (US)

Hair Color: Black

Body type: hourglass

Skin: Tanned complexion

Dress Size: 6

Figure Measurements: Bust = 36 | Bra = 34-C | Waist = 24 | Hips = 36

Heritage/Ethnicity/Race: Considered Caucasian

Hometown: Factory

Natalie had a similar build: dark-skinned and wavy-haired brunette without any clothes at all covering her perfect breasts.

#### **Natalie Body Stats:**

Age (in appearance): 28

Height: 5'5" (165 cm) | Weight: 119 lbs (54 kg)

Eye Color: Black

Feet/Shoe Size: 9 (US)

Hair Color: Black

Body type: hourglass toned/athletic

Skin: Chocolate brown

Dress Size: 6

Figure Measurements: Bust = 34 | Bra = 34-A | Waist = 24 | Hips = 36

Heritage/Ethnicity/Race: Considered African

Hometown: Factory

Amber was light-skinned with freckles, average-looking, but cute. She was dressed in a short tennis dress. All of them looked realistic, but Amber seemed most human-like.

**Ambrosia (Amber) Body Stats:**

Age (in appearance): 23

Height: 5'8" (172 cm) | Weight: 137 lbs (62 kg)

Eye Color: Pale-Green

Feet/Shoe Size: 8 (US)

Hair Color: Redhead

Body type: hourglass

Skin: Pale complexion with freckles

Dress Size: 6

Figure Measurements: Bust = 36 | Bra = 34-C | Waist = 26 | Hips = 36

Heritage/Ethnicity/Race: Considered Caucasian

Hometown: Factory

An advanced robot (android) built to resemble an attractive twenty-two-year-old woman. She was built as the perfect stunningly beautiful, sexually compliant, and loyal girlfriend. She has the visage of the late entertainer Aaliyah. She is anatomically correct to a real woman's body. Alfonso Linton was able to download a custom personality for her. She becomes increasingly emotional and even capable of love for Alfonso. Alfonso explains Lia's personality as being sensual, sweet, charming, polite, and "completely genuine in that sensuality."

She had a terrific look — midriff-bearing tops, dark shades, and a Veronica Lake sweep of hair over the left eye — but as was the case with her music, her sexuality was understated and tasteful.

**Lia Body Stats:**

Age: 22-year-old appearance

Height: 5'7" (171 cm) | Weight: 120 lbs (53 kg)

Eyes: Dark Brown

Shoe Size: 7 US

Hair: Black, long, silky

Body type: toned/athletic with some curves

Skin: chocolate complexion

Dress Size: 4

Measurements: Bust = 34 | Bra = 32-B | Waist = 24 | Hips = 34

Heritage/Ethnicity/Race: Considered African-American

Hometown: Born (built) in Factory

"Yesteryear Babe" YB-SX Alpha-6 Series (Alternate PCM-21 NG1A/NG Series or NewGen PCM Series)  
Models

**Marilyn Body Stats:**

Age: 36-year-old appearance

Height: 5'5.5" (166.62 cm) | Weight: 118 lbs (53.5 kg)

Eyes: Brown

Shoe Size: 7AA (US) 38-39 (European)

Hair: Platinum Blond

Body type: curvaceous

Skin: pale

Dress Size: 12

Measurements: Bust = 36 | Bra = 36-D | Waist = 22 | Hips = 35

Heritage/Ethnicity/Race: Considered Caucasian

Hometown: Factory

### **Dorothy Body Stats:**

Age: 42-year-old appearance

Height: 5'5" (165 cm) | Weight: 115 lbs (52.2 kg)

Eyes: Dark Brown

Shoe Size: 7.5 (US)

Hair: Dark Brown

Body type: curvaceous

Skin: dark caramel complexion

Dress Size: 8

Measurements: Bust = 36 | Bra = 36-D | Waist = 24 | Hips = 36

Heritage/Ethnicity/Race: Considered African-American

Hometown: Factory

### **Julie Body Stats:**

Age: 34 years old (in appearance)

Height: 5'11" (180 cm) | Weight: 143 lbs (65 kg)

Eye Color: Dark Brown

Feet/Shoe Size: 10.5 US

Hair Color/Length: Dark brown, long

Body type: Hourglass

Skin: Pale complexion

Dress Size: 8

Figure Size: Bust = 37 | Bra = 36-C | Waist = 23 | Hips = 37

Heritage/Ethnicity/Race: Considered Caucasian

Hometown: Factory

### **Annette/Michelle Body Stats**

Age: 21 years old appearance

Height: 5'3" (160 cm) | Weight: 128 lbs (58 kg) (Annette), 5'5" (165 cm) | 120 pounds (52 kg) (Michelle)

Eyes: Dark Brown

Shoe Size: 6 - 7 US

Hair: Brunette, Dark brown

Body type: Average (Annette) | toned/athletic with some curves (Michelle)

Skin "Mediterranean/olive" complexion (pierced ears, pierced navel, and tattoo on lower torso on Michelle)

Dress Size 6 (Annette); 2 (Michelle)

Measurements Bust = 38 | Bra = 34-D | Waist = 24 | Hips = 36 (Annette), Bust = 34 | Bra = 32-C | Waist = 26 | Hips = 34 (86-64-86 cm) (Michelle)

Heritage/Ethnicity/Race Considered Arab, Italian, or Latina

Hometown: Factory

### **Sally Body Stats:**

Age: 28 years old appearance

Height: 5'3" (160 cm) Weight: 128 lbs (58 kg)

Eyes: Dark Blue

Shoe Size 6 - 7 US

Hair: Brunette, Dark brown

Body type: hourglass, Amazon type

Skin: tanned

Dress Size 6

Measurements Bust = 36 | Bra = 36-C | Waist = 25 | Hips = 36

Heritage/Ethnicity/Race Considered European-American

Hometown: Factory

She was radiant. She was far too perfect to be human, if only by virtue of the fact that she was so well-groomed. Her flowing blonde mane had nary a split end, her flawless bronzed skin had none of the telltale streaks of dirt that betrayed the harshness of life in the 21st century. Ruby lipstick covered her pouty lips, and she wore mascara over her pale green eyes. She was clad in a glamorous black dress, backless and low-cut, along with high heels. Andy glanced down at her massive, unbelievably gravity-defying breasts and chuckled at the thought that she looked like an ultra-high-end prostitute, the kind of woman a high-roller or CEO would have given ten thousand dollars in exchange for an unforgettable night.

Her voice was light and breathy. It was instantly familiar- he'd chosen it after all.

She smiled, exposing a set of gleaming, perfect teeth.

She now wore a short pink sundress, along with an apron and oven mitts.

She pulled out a red bikini for herself.

Andy struggled to keep his eyes off of her round, perky nipples and her hairless, puffy labia. Through a tremendous show of willpower, he commanded himself to stay limp.

### **Sky Body Stats**

Age (in appearance): 28

Height: 5'8" (173 cm) Weight: 160 lbs (72.5 kg)

Eye Color: Pale-Green

Feet/Shoe Size: 8 (US)

Hair Color: Blond

Body type: hourglass

Skin: Pale complexion

Dress Size: 6

Figure Measurements: Bust = 40 | Bra = 36-DDD (36-F) | Waist = 28 | Hips = 36

Heritage/Ethnicity/Race: Considered Caucasian

Hometown: Factory

### **Sofia Body Stats**

Age: 28 years old appearance

Height: 5'7" (170 cm) | Weight: 130 lbs (59 kg)

Eyes: Dark Blue

Shoe Size: 8 US

Hair: Brunette, Dark brown

Body type: hourglass

Skin: "Mediterranean/olive" complexion

Dress Size: 6

Measurements: Bust = 38 | Bra = 34-DD (34-E) | Waist = 28 | Hips = 38

Heritage/Ethnicity/Race: Considered Arab, Italian, or Latina

Hometown: Factory

### **Scarlett Body Stats:**

Age (in appearance): 28

Height: 5'4" (163 cm) | Weight: 120 lbs (54 kg)

Eye Color: Dark-Green

Feet/Shoe Size: 9 (US)

Hair Color: Red

Body type: hourglass

Skin: Pale complexion with freckles

Dress Size: 4

Figure Measurements: Bust = 38 | Bra = 32-DD (36-E) | Waist = 26 | Hips = 36

Heritage/Ethnicity/Race: Considered Caucasian

Hometown: Factory

Sally could not really understand why the boy was attracted to her and went to so much trouble dressing her up. As such, she started to perform an analysis.

Sally started by feeding her body measurements into one of her utility programs (72.5" height barefoot, 36" bust- bust protrusion- large 'C' cup, 25" waist, 36" hips, calves 16.5" 14" biceps, apparent 5% body fat, apparent age 28 ) It gave her the phrase "tall, shapely thin amazon, babe" She checked her release notes and found that her face and body were designed to be a morph of a younger Faith Hill.



(from 2001) and Julie Newmar (One of the Catwomen on the Batman TV show) from the year 1967. Looking these names up using her wireless web connection, the first site was called "Babes of Yesteryear" (The year was 2027). Deciding that she had a good chance of being a babe, she did another web search. The first three links were an old movie about a pig, a baby store, and "The Ultimate Babe Site". Ruling out that she was a piglet or a baby, she surfed "The Ultimate Babe Site". On the title page was a hyperlink that said, "What is a Babe?" The definition read as "Usually applied to a very attractive female". There was also an interview with an anonymous babe, which explained how people were drawn to her. The robot also took the babe challenge test, which exclusively asked questions about her looks. She scored 9.78 out of a possible 10.

Sally quickly came to the conclusion that Bobby enjoyed her looks and that this had a strong effect on him! Sally began to study her outfit and accessories and was still a little perplexed. Why did the boy want her to be so tall? She understood that physically they were mismatched, but why did he want to even do it to a larger extent? She recalled the word amazon from one of her previous internet searches. She was surprised to find some pictures of men submitting to these large muscular women and wondered if Bobby was like that. Though not overly muscular in form, she knew that she was much physically stronger than even large men were if an emergency required it. The word that she constantly found on the amazon sites was dominant. Next, she began to type in descriptions of her unfamiliar clothing, i.e. Tall boots, long gloves, suede suits, and got some hits on these. Again, the words dominant, fetish, and boss lady-underling came up again much of the time. Sally began to get the meaning of dominant and fetish from the contents of the sites and wondered if Robert wanted her to be a dominant amazon babe wearing fetish clothing.

He squinted at the light as the door opened. After a moment the form came into focus.

She was radiant. She was far too perfect to be human, if only by virtue of the fact that she was so well-groomed. Her flowing blonde mane had nary a split end, her flawless bronzed skin had none of the telltale streaks of dirt that betrayed the harshness of life in the 21st century. Ruby lipstick covered her pouty lips, and she wore mascara over her pale green eyes. She was clad in a glamorous black dress, backless and low-cut, along with high heels. Andy glanced down at her massive, unbelievably gravity-defying breasts and chuckled at the thought that she looked like an ultra-high end prostitute, the kind of woman a high-roller or CEO would have given ten thousand dollars in exchange for an unforgettable night.

"Hi Andy."

Her voice was light and breathy. It was instantly familiar- he'd chosen it after all.

"You look like you've lost weight, Sky."

She smiled, exposing a set of gleaming, perfect teeth. "You're only looking at an infiltrator unit. There's no programming in this CPU, all instruction is entirely being relayed from my central servers. I'm devoting 0.035% of my runtime to you, baby."

"I'm flattered. Why haven't you killed me?"

"I guess I have a soft spot for you, baby. After all, you helped make me."

She now wore a short pink sundress, along with an apron and oven mitts. Andy thought that an ironic touch for a woman who could probably survive temperatures that would vaporize the oven. She laid a tray of blueberry muffins on the counter and beamed at Andy, her fine set teeth gleaming.

"That's okay baby, you'll earn your place soon enough." She gracefully tipped forward over the counter and kissed Andy on the cheek. God, she smells even better than the muffins. Andy quietly cursed the part of his brain that volunteered that observation.

Andy was starving. Well, who wasn't? He shoveled down the muffins, along with tall glasses of orange juice and milk that Sky provided for him. All the while, she sat quietly across the table from him, in a casual repose with her legs crossed, her elbows on the table and her head in her hands. To an outside observer it would have almost looked as if she were admiring him.

"It's lovely out today, isn't it? Want to go for a swim?"

"I would have thought you would sink."

"I have a strong breast stroke" she giggled. "I'm kidding. I'll have to stay in the shallow end of the pool."

"In our pajamas?" Andy had hoped to derail this grotesque charade.

"I have swimwear prepared for us." She removed her oven mitts and apron and placed them folded neatly in a cupboard.

Sky took Andy by the hand and led him back to the bedroom. She rifled through the closet and tossed him a pair of swim trunks and flip-flops. She pulled out a red bikini for herself.

Andy's heart sank. "Do you mind?"

"Oh, don't worry honey, it's nothing I haven't seen before."

Andy tried his best to conceal himself as he got changed. Sky made no such effort. Andy struggled to keep his eyes off of her round, perky nipples and her hairless, puffy labia. Through a tremendous show of willpower he commanded himself to stay limp.

# Michelle Galeta/PCM-21 NG1A

## "Michelle" Variant.

Her visage is said to be partially based on actress Annette Funicello's face and the body of Simonetta Vespucci, a twenty-two-year-old woman, which was a model for the Venus figure in Sandro Botticelli's *The Birth of Venus* painting

### Annette/Michelle Body Stats

Model PCM-21 NG1A (NG Series or NewGen PCM model)

Birthday 21 October 2063 (first activation date, "fake id" info see below)

Age 21 years old appearance

Height 5'3" (160 cm) Weight 128 lbs (58 kg) (Annette) 5'5" (165 cm) 120 pounds (52 kg) (Michelle)

Eyes Dark Brown

Shoe Size 6 - 7 US

Hair Brunette, Dark brown

Body type Average (Annette) toned/athletic with some curves (Michelle)

Skin "Mediterranean, olive" complexion (pierced ears, pierced navel and tattoo on lower torso on Michelle)

Dress Size 8 (Annette); 2 (Michelle)

Measurements Bust = 38 Bra = 34-D | Waist = 24 Hips = 36 (Annette) Bust = 34 Bra = 32-C | Waist = 26 Hips = 34 (86-64-86 cm) (Michelle)

Heritage/Ethnicity/Race Considered Arab, Italian, or Latina

Hometown Factory

- She has her own passport, driver's license, birth certificate, and social security card. The info on her birth certificate: Alice Michelle Galeta, born April 4, 2045, at 12:13 pm at Washington Hospital Center.
- The date is in reference to a passage from George Orwell's "1984." "It was a bright cold day in April and the clocks were striking thirteen."



**Type:** Gynoid **Model:** PCM-21 **NG1A Name:** Michelle **Statistics:** 34C-24-36 **Height:** 5 ft 3 in **Hair:** Brunette **Eyes:** Brown **Replicate Age:** 21 years old **Activation Date:** 21 October 2007

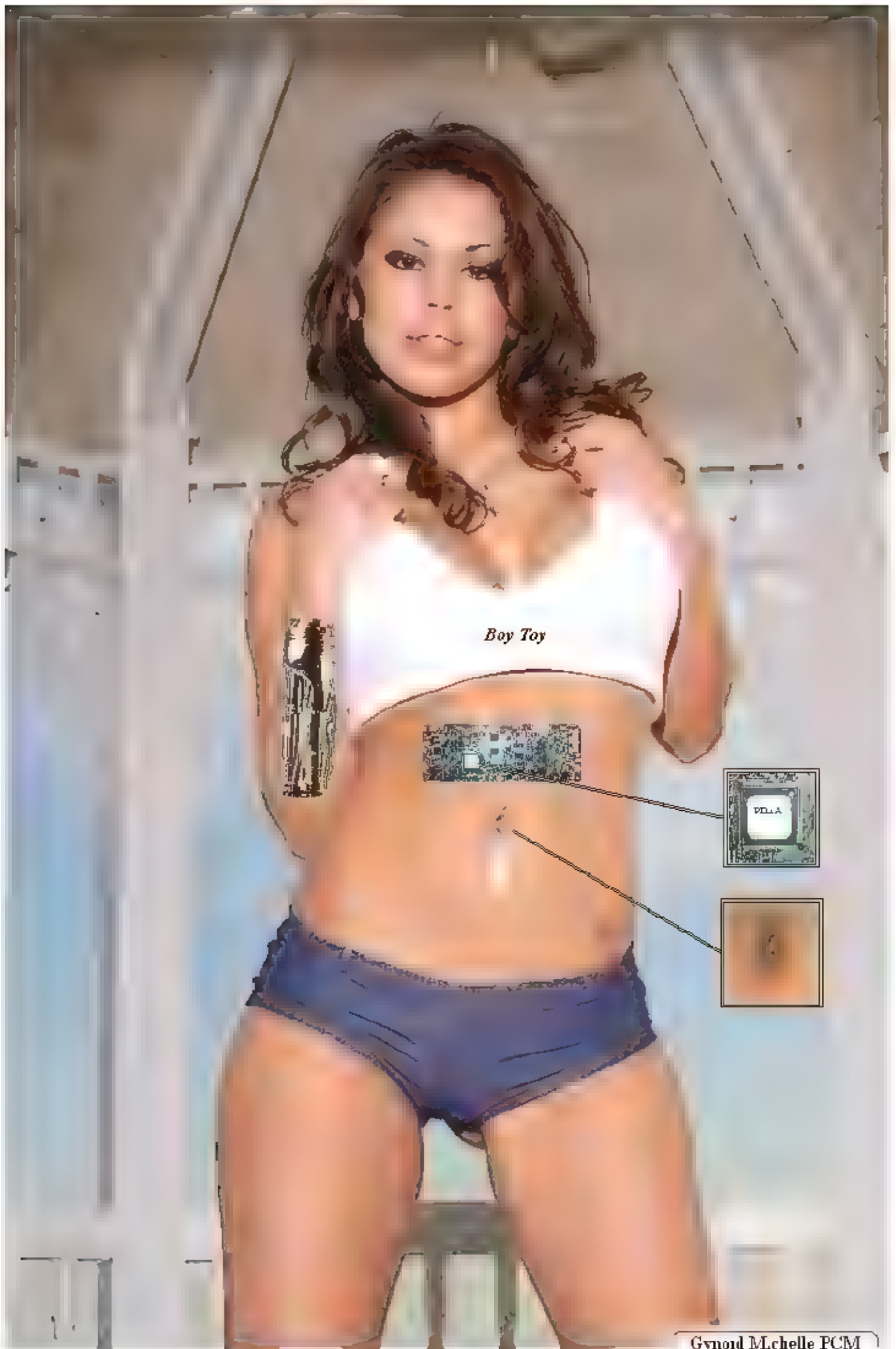
Michelle is the prototype for the NG Series, or NewGen PCM model. She is the most sophisticated Gynoid built to date. Emphasis has been placed on realism. This unit is the first to incorporate new technology which allows Michelle to recreate a pulse, body warmth, pupil dilation, sweat secretion, saliva secretion, artificial tears, ingest small quantities of liquids, and "Sleep Mode". With exception of this promo photo showing her frontal access panels, Michelle is completely seamless.

Various aesthetic options are available, seen here are pierced ears, navel jewelry, and a tattoo on her lower torso. Eye color, hair color, skin pigmentation, breast size, etc. can all be varied. Michelle comes pre-programmed with PleasureDoll 2.0 XP as well as other popular software.

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**Gynoid Michelle** - This was used for promotional, marketing and technical specifications. The operational unit "Michelle" has seamless dermis. This photo illustrates Michelle's three torso access panels as well as some of her joint connection points. Frame is made up of ten components.



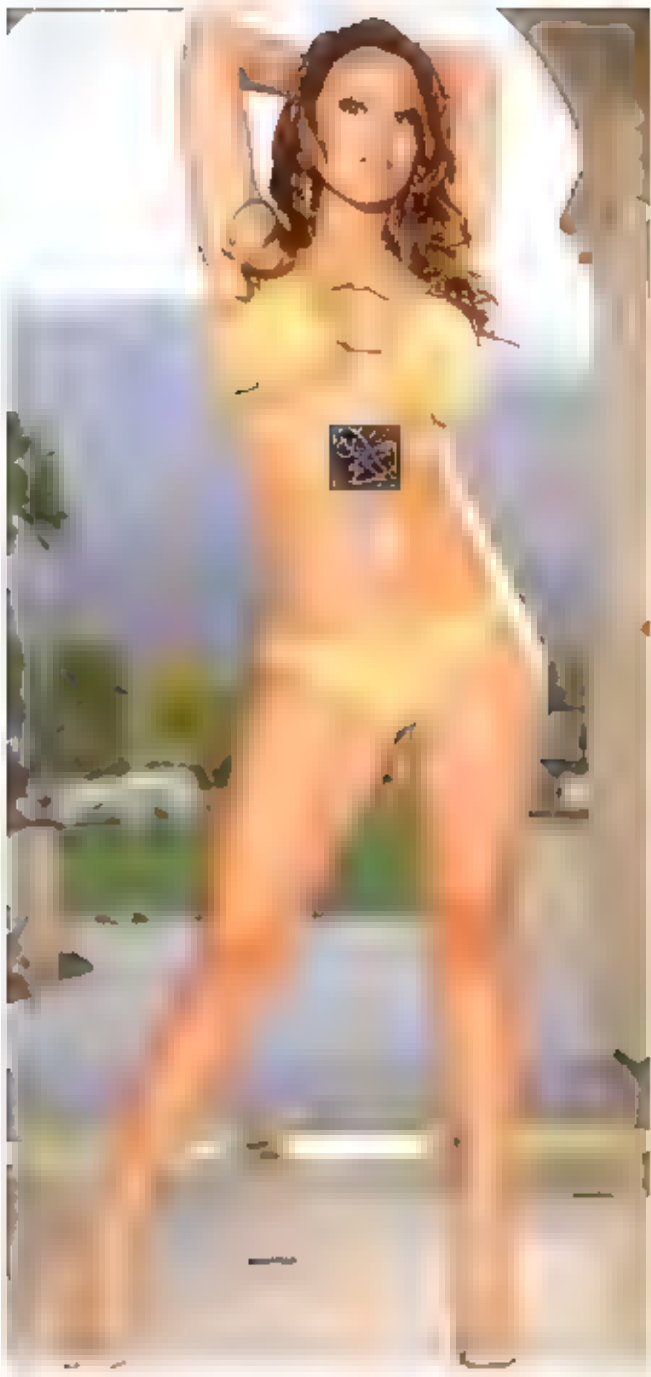


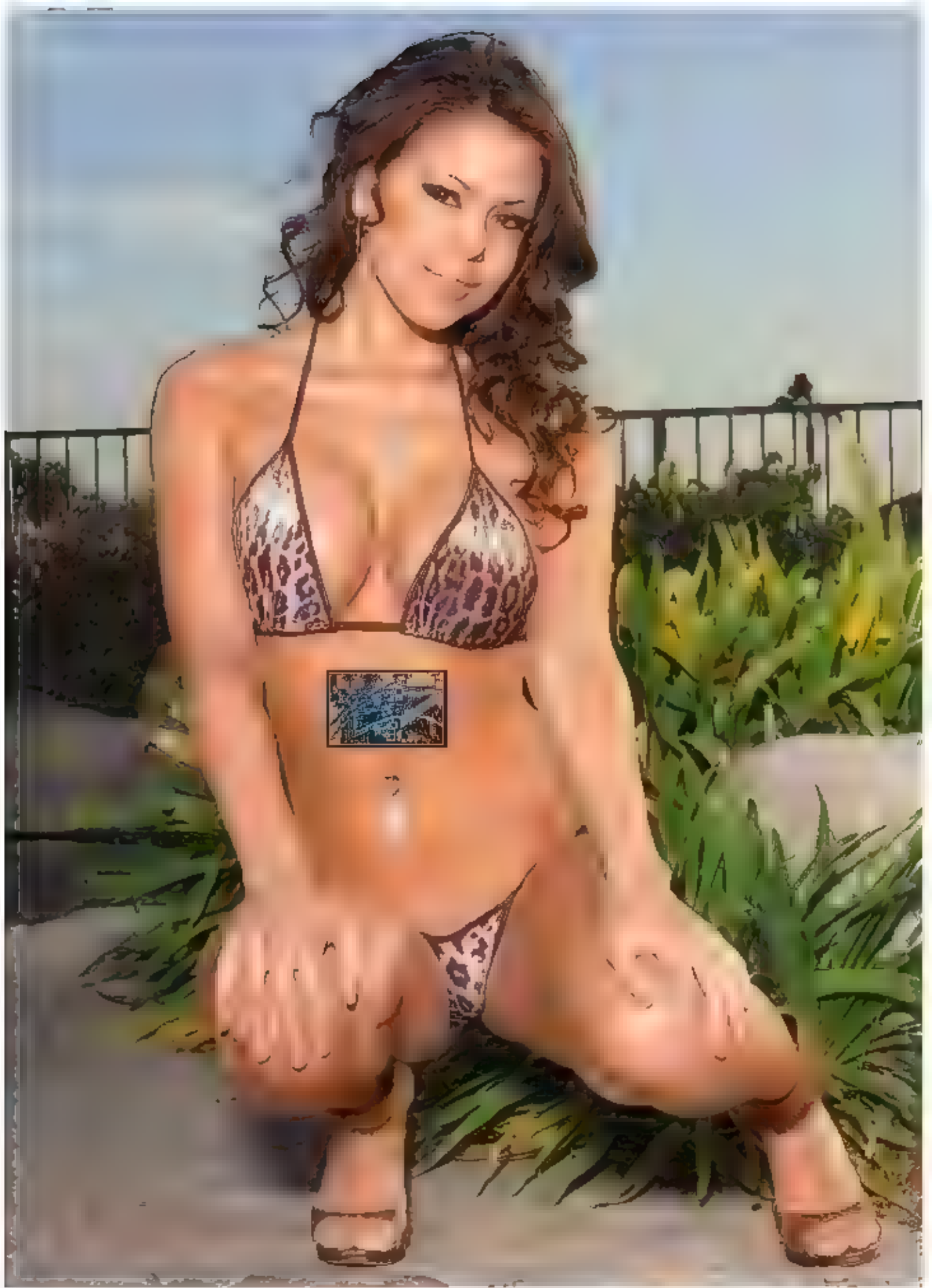
*Boy Toy*

VELLA



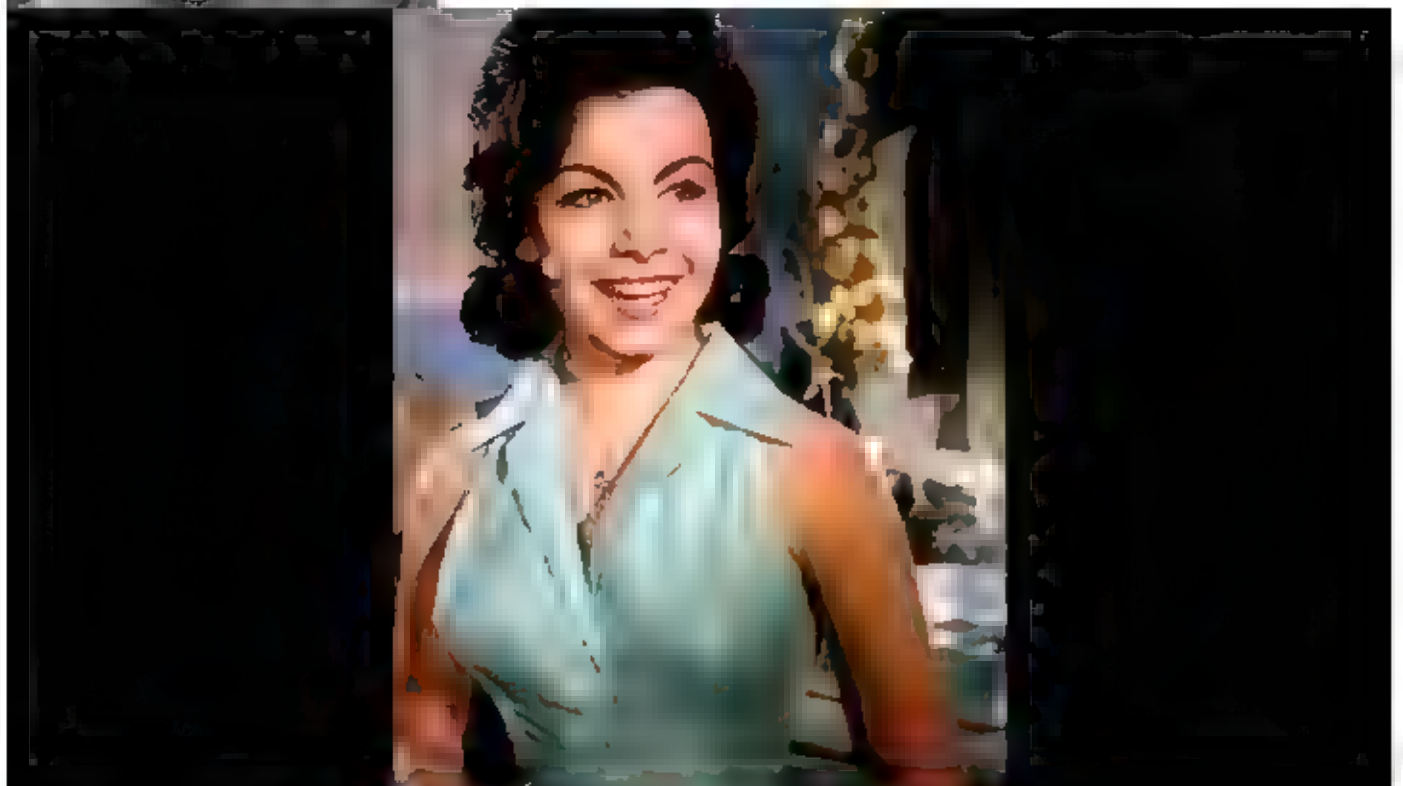






Above "Michelle" photos by Gynoidlover, fembotwiki.com





Above pictures of actress Annette Funicello





Gynord Bahara 1



Gyno d Bahara 2



|       |           |           |        |
|-------|-----------|-----------|--------|
| TYPE  | Gynoid    | NAME      | Brandy |
| MODEL | PCM       | ACTIVATED | 2 Jan  |
| STATS | 14C 24 34 | HEIGHT    | 5' 4"  |

Brandy is seen here at a Gynoid competition, which are becoming very popular with the import car scene. Gynoid bikini contests are seen side by side by bio-female bikini contests. Gynoid owners can expect to win cash, parts, or even sponsorship if their Gynoid wins. Though Brandy is a PCM she has never been used or even programmed for the pleasure companion role.

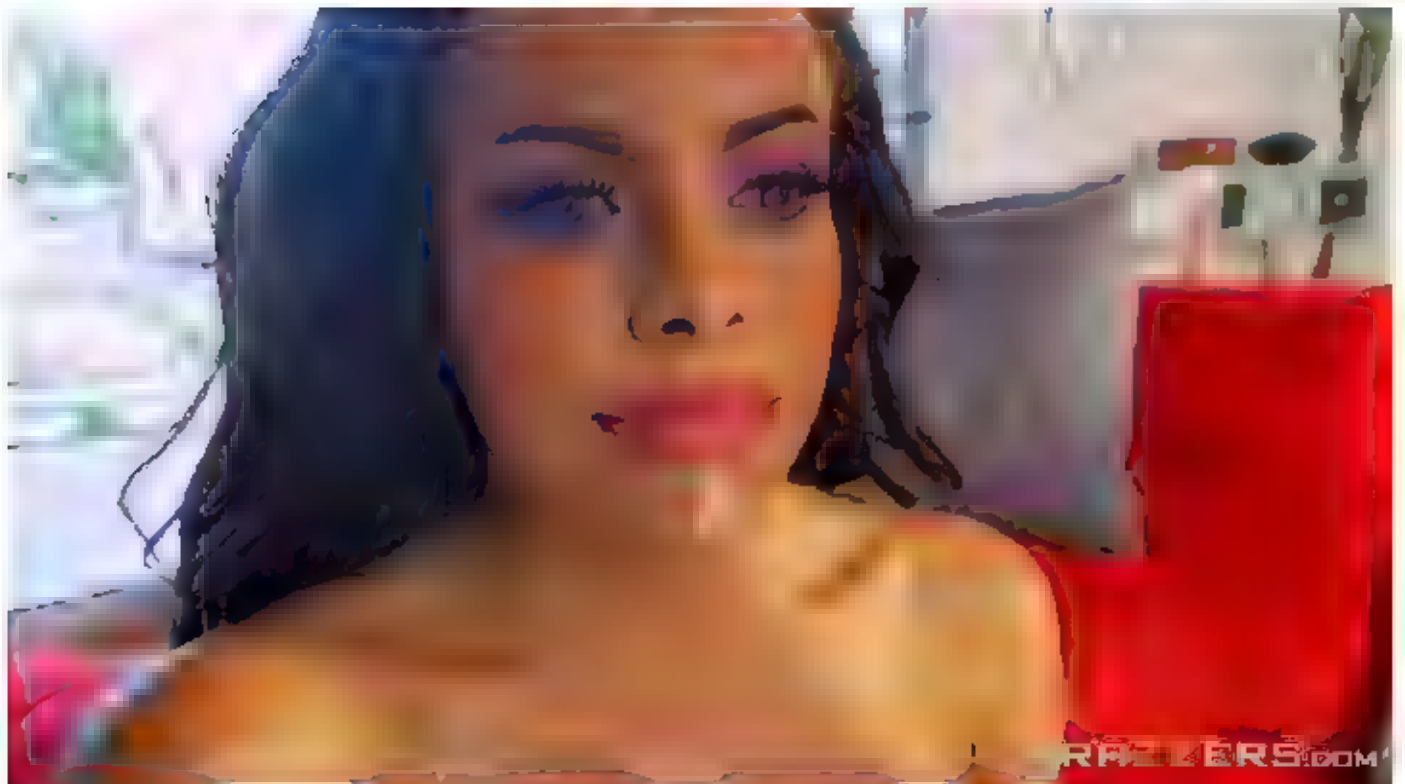


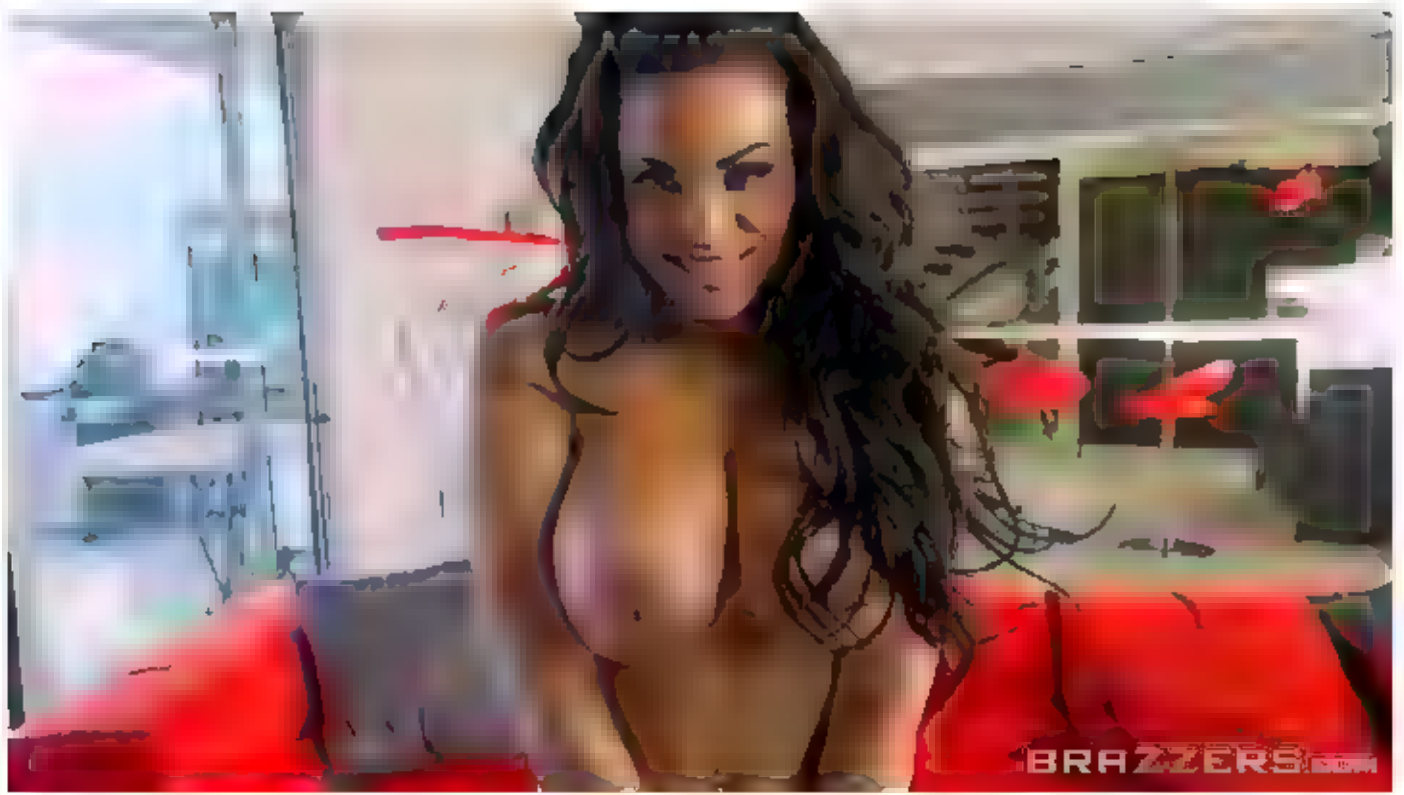
Gynoid Brandy PCM built by IHR Inc. dba PD Inc

**Type:** Gynoid **Name:** Brandy **Model:** PCM **Activated:** 21 Jan **Stats:** 34C-24-34 **Height:** 5 ft 4 in

Brandy is seen here at a Gynoid competition which are becoming very popular with the import car scene. Gynoid bikini contests are seen side by side by bio-female contests. Gynoid owners can expect to win cash, parts, or even sponsorship if their Gynoid wins. Though Brandy is a PCM she has never been used or even programmed for the pleasure/companion role.







Brazzers Exxtra - (Luna Star, Jessy Jones) - ZZ Sex Dol.

# Pandora's Eye: Lia

## Lia Body Stats:

Age: 22 year old appearance

Height: 5'7" (171 cm) Weight: 120 lbs (53 kg)

Eyes: Dark Brown

Shoe Size: 7 US

Hair: Black, long, silky

Body type: toned/athletic with some curves

Skin: chocolate complexion

Dress Size: 4

Measurements: Bust = 34 | Bra = 32-B | Waist = 24 | Hips = 34

Heritage/Ethnicity/Race: Considered African-American

Hometown: Born (built) in Factory

An advanced robot (android) built to resemble an attractive twenty-two-year-old woman. She was built as the perfect stunningly beautiful, sexually compliant, and loyal girlfriend. She has the visage of the late entertainer Aaliyah. She is anatomically correct to a real woman's body. Alfonso Linton was able to download a custom personality for her. She becomes increasingly emotional and even capable of love for Alfonso. Alfonso explains Lia's personality as being sensual, sweet, charming, polite, and "completely genuine in that sensuality."

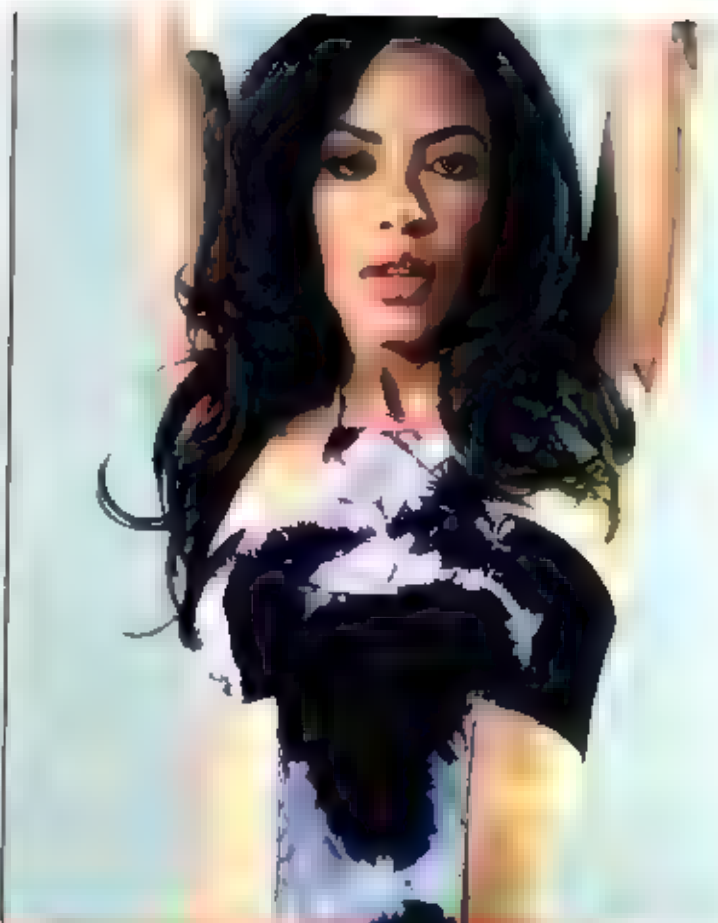
She had a terrific look — midriff-bearing tops, dark shades, and a Veronica Lake sweep of hair over the left eye — but as was the case with her music, her sexuality was understated and tasteful.





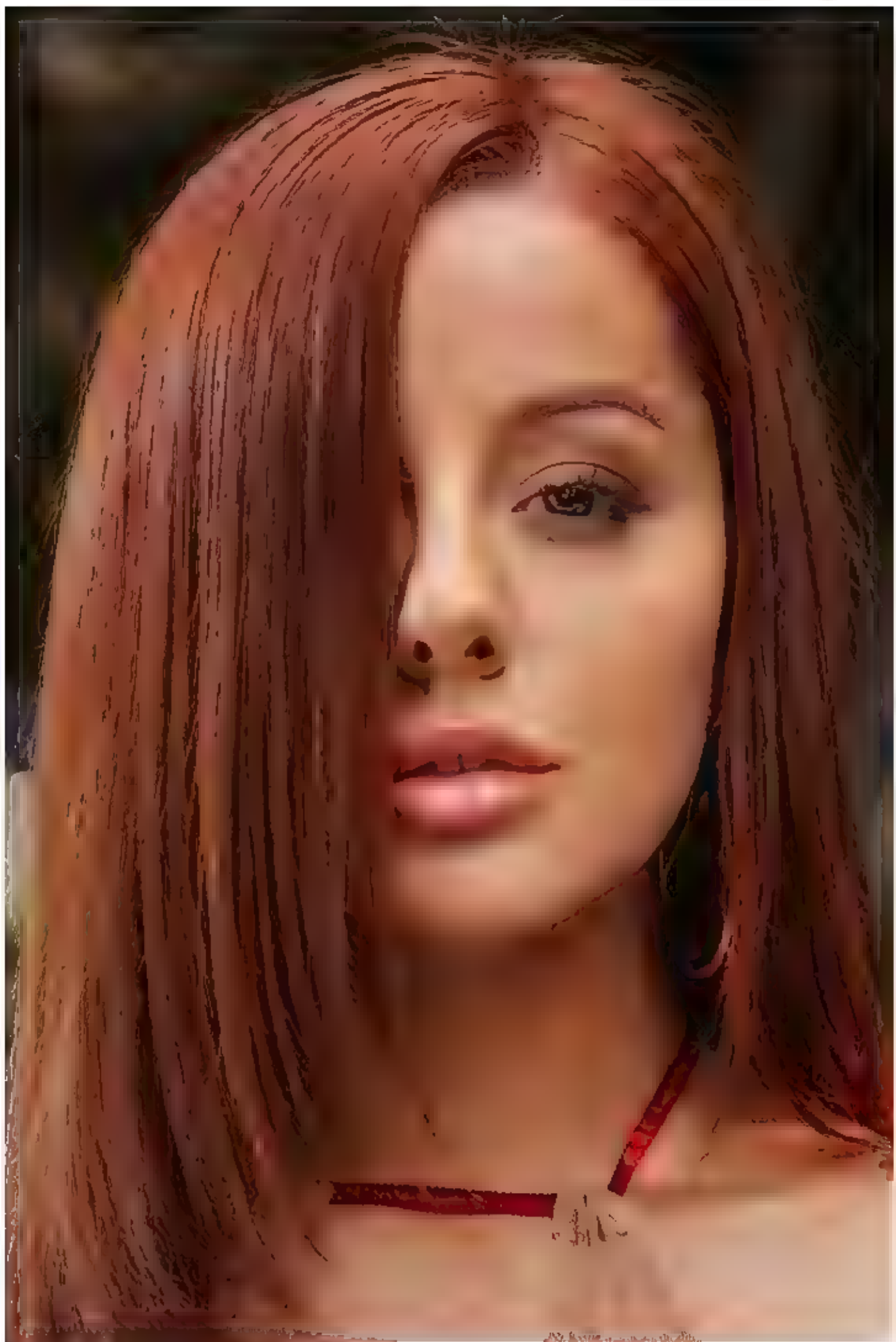






Veronica Lake





# Star Trek (TOS) - What Little Girls Are Made Of

"I'm like Dr. Brown, an android." Andrea said. "Didn't you know?"

"Remarkable isn't she? Notice the lifelike pigmentation, the variation in skin tones. The flesh has warmth. There's even a pulse. Physical sensation." Dr. Korby said.

"How convenient," Nurse Chapel said.

"Christine, you must realize that an android is like a computer. It does only what I program her. As a trained scientist yourself, you must realize --"

"That given a mechanical Dr. Brown, that a mechanical geisha would be no more difficult." Nurse Chapel said.

"You think that I could love a machine?" Dr. Korby said.

"Did you?"

"Andrea is incapable of that. She simply obeys orders. She has no meaning for me. There is no emotional bond. Andrea, kiss Captain Kirk." Dr. Korby said.

She kiss him on the mouth.

"Now strike him."

She slaps Captain Kirk.

"You see, there's no emotion in it. No emotional involvement. She simply responds to orders. She's a totally logical computer. A thing. It's not a woman. Now do you understand?"

"Not yet." Kirk said.

Andrea kisses him, then attempts to strike him when he blocks her hand. He pulls her close and then they kiss again. She pushes away while shaking her head. "No. I'm not programmed for you."

"What's a matter, Andrea? Confused?"

"No." Andrea walks away from him.

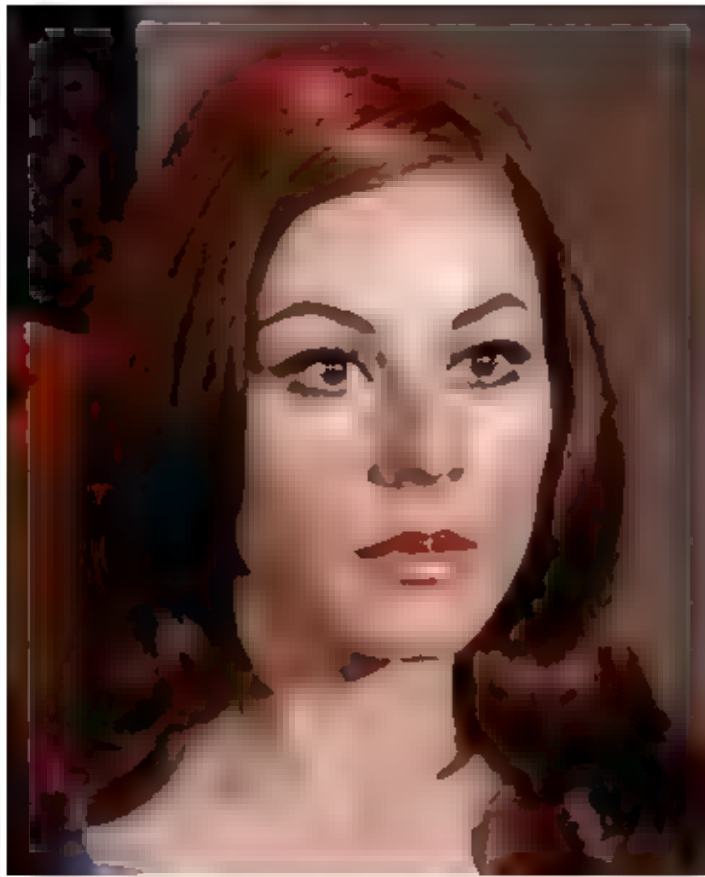
"I listen to your instructions, obey them as stated." Andrea said.

"No, you will never understand. I constructed a perfect being. Tested it. Proved it." Dr. Korby said.

"To love you. To kiss you." Andrea said.

"No, you cannot love. You're not human." Dr. Korby said.





## The Outer Limits - Valerie 23

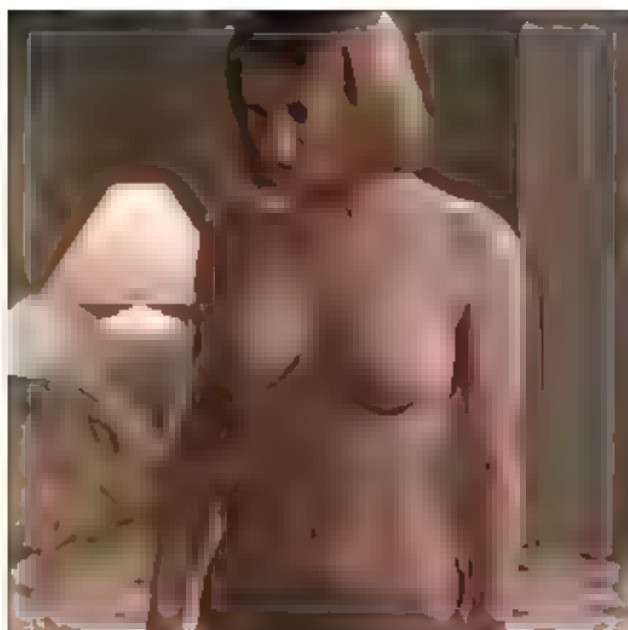
She takes off her nightgown. "I am fully functional "

He sits there in awe of her perfect beauty then he touches her breasts

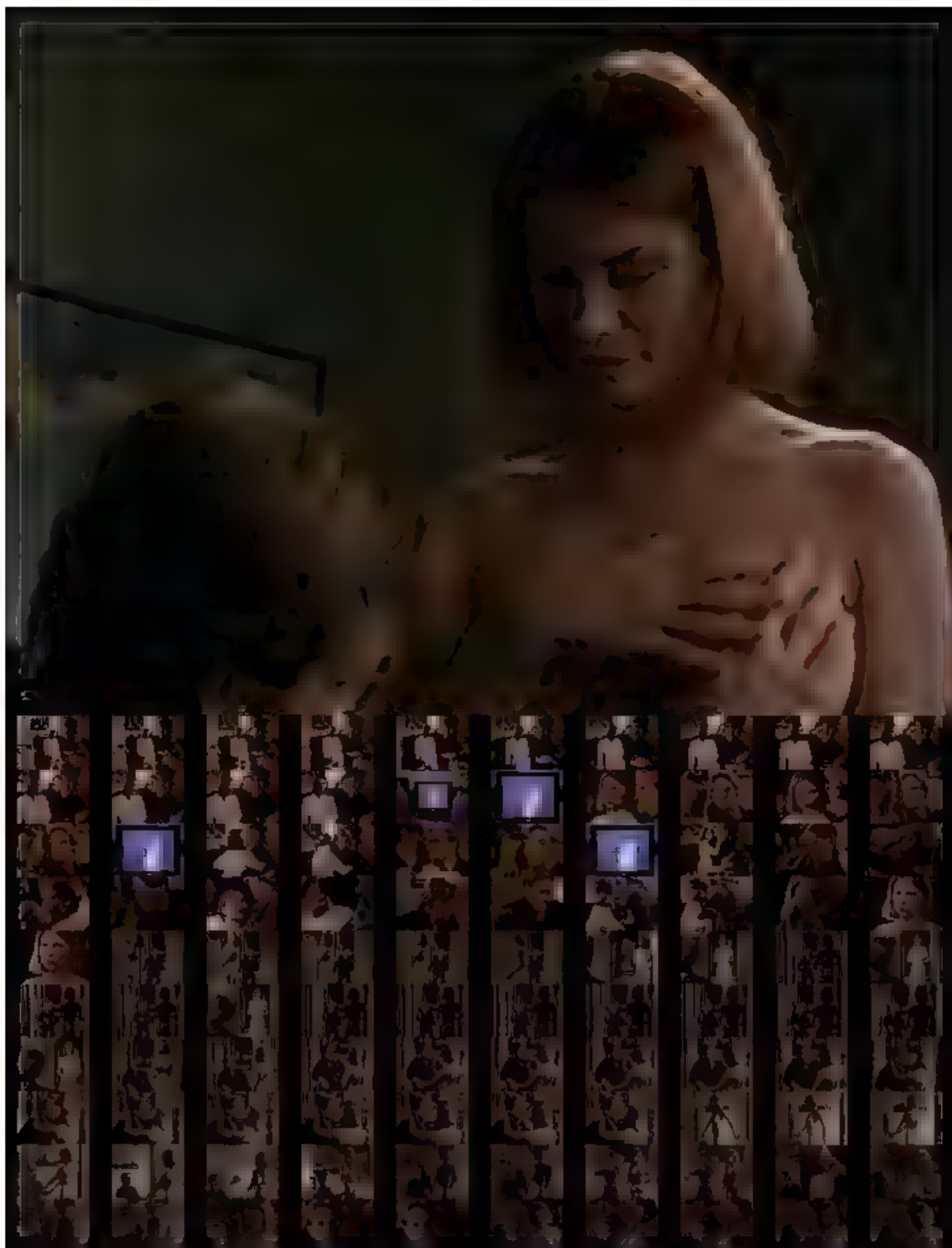
"Fully functional?"



"Yes Fully."









In keeping with ErosScript's realistic origins using readability features from Visual Basic, Pascal, and Ruby this is meant to be a language that would have been used in my sci-fi novels, APL-PI and Designer Date. Something that non-programmers can learn quickly, understand, and use easily, like Simulink, Blockly, Python, Ruby, and Visual Basic, but is as powerful as C/C++, Python, Java, MATLAB, Lisp, Prolog, and Rust. It should address the personality and behavior of the android. The physical gender (male or female) of the genitalia and its function, arousal, orgasm, etc. The sexuality (sexual preference), heterosexual, homosexual, etc.

Modesty protocols, culture, and social standards (clothed, nude, bikini, type of dress).

Modesty Level Protocols. Level Zero is nudity, no inhibitions. Level One is only genitalia like the breasts and crotch are covered. Level Two is fully clothed with arms and legs visible. Level Three is fully clothed no skin showing. Level Four is nicknamed "Burqa mode" after the Islamic custom of women being fully covered up from head to toe. Of course, there are custom exceptions based on personality behavior profiles, social norms, customs and fashion. Security authorization could be setup only for certain users to see a gynoid nude, like their primary user, or an authorized technician. These protocols are as important as the Asimov's "Three Laws", installed into the firmware.

Advanced fembots or gynoids like Maria are different from women. Even though Maria was a self-thinking, intuitive fembot, there would always be differences demarcating the barrier between fembot and woman. For example, Maria appeared to be in her right mind and able to make many of her own decisions, but if she was caught nude, her first reaction wasn't to grab for her clothing and cover herself back up from nakedness. To Maria, and most of other fembots, there was no difference between nude and clothed. They happily remained in whatever state they were put in last. This is a leftover from their original programming. The only reason they wore clothing was to blend in with everyone else. The Modesty Protocols solve this problem.

Configuration of BIOS-UEFI type firmware. Configuration of operating systems and networking while remaining platform and device independent. Incorporate the default setting of Asimov's "Three Laws" into the logic of the language while still keeping the flexibility of the language and its creative usage.

The vision for ErosScript is both ambitious and intricate. Here's a structured approach to integrating all these elements.

### ### 1. \*\*Readability and Ease of Use\*\*

- **Syntax Design** Borrow from the simplicity of Visual Basic and Pascal to ensure the syntax is clean and readable. Incorporate Ruby's expressive syntax to make the language feel intuitive and flexible.
- **Blocks and Flow Control** Consider a block-based programming approach for non-programmers, similar to Blockly. This can simplify the learning curve while maintaining the underlying power of traditional coding.

### ### 2. \*\*Power and Flexibility\*\*



- **Core Features** Ensure the language supports powerful data structures, control flow, and performance optimizations akin to C/C++, Python, and Rust. This includes support for object-oriented, functional, and procedural programming paradigms.

- **Advanced Features** Incorporate features from MATLAB, Lisp, and Prolog for specialized tasks, such as symbolic computation or logic programming, as needed

### 3. **Android Personality and Behavior**

- **Personality Traits** Define syntax and constructs to specify personality attributes, behavior patterns, and interactive responses. For instance

```
` eroscript
android Personality {
    trait' Friendly
    behavior' Responsive
}
```

- **Behavioral Scripts** Allow for scripting of complex behaviors and interactions using a combination of high-level commands and detailed configurations

### 4. **Physical and Sexual Attributes**

- **Gender and Sexuality** Include constructs to set physical attributes and preferences.

```
` eroscript
android Attributes {
    gender' Male
    sexuality' Heterosexual
}
```

- **Modesty and Social Standards** Provide options for configuring clothing and social behavior

```
` eroscript
android Social {
    attire' Nude
    modestyProtocol' High
}
```

### 5. **Firmware and OS Configuration**

- **Firmware Setup** Allow for configuration similar to BIOS/UEFI settings.

```
eroscript
firmware Configuration {
    bootOrder' [PXE, USB, SSD]
    security' Enabled
}
```

```

..
- OS and Networking Enable settings for OS and network configurations
  ` eroscript
    os Configuration {
      network: {SSID: "Network", Password: "Password"}
      services: [HTTP, FTP]
    }
..

```

### ### 6. **Asimov's Laws Integration**

```

- Default Behavior Incorporate Asimov's "Three Laws" as default safety constraints
  ` eroscript
    android Safety {
      law1: No harm to humans
      law2: Obey human commands
      law3: Protect own existence
    }
..

```

- **Flexibility** Allow developers to modify or extend these rules as necessary while maintaining core safety principles.

### ### 7. **Platform and Device Independence**

- **Abstract Layers** Use abstraction layers to ensure compatibility across various hardware and operating systems. Design the language to interact with underlying systems through a unified interface.

- **Portable Scripts** Ensure scripts written in ErosScript can be easily transferred and executed across different platforms without modification.

### ### 8. **Development and Deployment**

- **IDE and Tools** Provide an integrated development environment (IDE) with debugging, testing, and visualization tools to enhance usability for both novices and experts.

- **Documentation and Support** Offer comprehensive documentation and user support to help users understand and utilize the full capabilities of ErosScript.

By focusing on these areas, ErosScript can achieve a balance between ease of use and advanced functionality, making it both accessible to non-programmers and powerful enough for complex tasks.

ErosScript can indeed be adapted for use in magick and occult practices, especially for creating servitors. Here's how you could extend the language to accommodate these applications:

### ### Extended ErosScript/TulpaScript for Magick and Occult Use

```
`eroscript
// Received with the blessings of Lucifer, Belial, Azazel, and Papa Legba
// Based on the languages QuickBasic, Visual Basic, Pascal, Perl, Python,
// Ruby, and VRML
// Sorry for all of you C++, C#, and Java enthusiasts out there .
// Thanks to @Micah, @C Kendall, @Yberion, and others

import Shemhamphorasch // Shemhamphorasch code library
import Goetia           // Goetia code library
import Jinn             // Jinn code library
import Kabbalah         // Kabbalistic code library
import Enochian         // Enochian angelic code library
import XaTuring         // XaTuring God of the Internet
import ServitorLib      // Servitor code library
import Vodou            // Vodou code library
import Hoodoo           // Hoodoo code library

// In the beginning, Elohim created...
var Beginning = {
    LightElement = "Light";
    WaterElement = "Water";
    AirElement = "Air";
    EarthElement = "Earth";
    FireElement = "Fire";
};

servitor MyServitor {
    // Basic Information
    var Name = "MyServitor";
    var Purpose = "To assist with specific magickal tasks and rituals ";
    var CreationDate = "2024-08-01";
    var Age = "Newly created";

    // Appearance
    var Appearance = ""
    The servitor's appearance can be customized based on ritual needs
    Options include ethereal, human-like, or symbolic forms as required
    "";

    // Attributes
    var Attributes = {
        Strength: 10, // Scale from 1 to 10
        Intelligence: 8, // Scale from 1 to 10
        Agility: 7, // Scale from 1 to 10
        Charisma: 6 // Scale from 1 to 10
    };

    // Personality
    var Personality = ""
    MyServitor is designed to exhibit specific traits such as loyalty, focus,
    and determination, tailored to support the intended magickal operations
    "";

    // Powers and Abilities
```

```

var PowersAbilities = [
    "Magickal Energy Manipulation",
    "Ritual Assistance",
    "Aura Reading",
    "Protection Spells"
];

// Task and Purpose
var TaskPurpose = ""
MyServitor is programmed to perform tasks related to ritualistic magick,
including assisting with spellwork, maintaining protective wards, and
enhancing ritual effectiveness
"";

// Visibility and Interaction
var VisibilityInteraction = ""
MyServitor can be rendered visible or invisible as needed for rituals
Interaction can occur through ritualistic communication or symbolic gestures
"";

// Limitations and Safety
var LimitationsSafety = ""
MyServitor operates within the bounds of its programming and magickal
constraints. It is designed to avoid actions that could cause harm or disrupt
magickal processes
"";

// Custom Modesty Protocols
var ModestyProtocols = {
    levelZero: "Complete visibility without restrictions",
    levelOne: "Visible with minor coverings or symbols",
    levelTwo: "Fully covered with ritualistic attire",
    CustomExceptions: "Configurable based on ritual specifics and
practitioner needs "
};

// Configuration and Controls
var Configuration = {
    RitualSettings: "Configured for specific magickal operations and
ritual environments ",
    PowerSources: "Tuned to harness energy from designated sources (e.g ,
moon phases, elemental energies) ",
    SafetyProtocols: {
        ProtocolOne: "Ensure all actions are in alignment with the
practitioner's intent and ethical guidelines ",
        ProtocolTwo: "Avoid interference with other magickal entities or
rituals."
    }
};

// Activation and Deactivation
var Activation = ""
To activate MyServitor, use the command phrase "Invoke MyServitor" and
perform the necessary ritualistic gestures or symbols to bind its energy to
the task at hand
"";
var Deactivation = ""

```

To deactivate MyServitor, use the command phrase "Dismiss MyServitor" and conduct a closing ritual to release its energy and dissolve its presence

```
""";  
}
```

### ### Key Extensions for Magickal Use

1. **\*\*Attributes\*\*** Customizable attributes to define the servitor's strengths and abilities.
2. **\*\*Powers and Abilities\*\*** Functions tailored for magickal and occult practices.
3. **\*\*Custom Modesty Protocols\*\*** Adjustments for ritualistic visibility and attire.
4. **\*\*Configuration and Controls\*\*** Specialized settings for ritual environments and energy sources.
5. **\*\*Activation and Deactivation\*\*** Ritualistic commands and procedures for creating and dissolving the servitor.

These extensions provide a framework for integrating servitors into various magicka systems and rituals, allowing for a structured approach to their creation and management.

In keeping with ErosScript's realistic origins using readability features from QuickBasic, Visual Basic, Pascal, Python, and Ruby, this is meant to be a language that would have been used in my sci-fi novels, APL-PI and Designer Date. A language that would have been used in the cyberspace of the sci-fi writer, William Gibson novels. Something that non-programmers can learn quickly, understand, and use easily, like Simulink, Blockly, but is as powerful as C/C++, C#, Python, Java, MATLAB, Lisp, Prolog, and Rust. ErosScript can also be adapted for use in magick and occult practices, especially for creating servitors.

### Example code

```
// Received with the blessings of Lucifer, Belial, Azazel, and Papa Legba  
// Based on the languages QuickBasic, Visual Basic, Pascal, and Python  
// Sorry for all of you C++, C#, and Java enthusiasts out there .  
// Thanks to @Micah, @C Kendall, @Yberion, and others
```

```
import Shemhamphorasch // Shemhamphorasch code library  
import Goetia           // Goetia code library  
import Jinn             // Jinn code library  
import Kabbalah         // Kabbalistic code library  
import Enochian         // Enochian angelic code library  
import XaTuring         // XaTuring God of the Internet  
import ServitorLib      // Servitor code library  
import Vodou            // Vodou code library  
import Hoodoo           // Hoodoo code library
```

```
var Beginning = {  
  // In the beginning, Elohim created  
  // Elements  
  Light = ""  
  Water = ""  
  Air = ""  
  Earth = ""  
  Fire = ""  
}
```

```

};

servitor Danielle {
  // Basic Information
  var Name = "Danielle";
  var Age = "22 years old (appearance)";
  var Gender = "Female";
  var SexualPreference = {
    Heterosexual: 80%,
    Bisexual: 20%
  };
  var EyeColor = "Dark Brown";
  var HairColor = "Brunette, shoulder length, wavy";
  var Form = "Humanoid";
  var BodyType = "Athletic figure with some curves";
  var Skin = "Silky smooth chocolate complexion";
  var Measurements = {
    Bust: "34 inches",
    Bra: "32-B",
    Waist: "24 inches",
    Hips: "34 inches"
  };
  var DressSize = "4";
  var ShoeSize = "7 US";
  var HeritageEthnicityRace = "African-American";
  var Voice = "Seductive mellow voice Can sound like a white girl at
times ";
  var Smile = "Perfect";

  // Appearance
  var Appearance = ""
  Danielle embodies a stunningly beautiful and seductive young woman with
an athletic figure and chocolate complexion Her visage resembles the late
entertainer Aaliyah, featuring expressive dark brown eyes and a captivating
smile Danielle has shoulder length, wavy brunette hair and is programmed to
operate nude or topless with user permission If clothing is provided, she
prefers bikinis, midriff-bearing tops, sports bras, tight yoga pants, sheer
dresses, leather jackets, and leather pants, focusing on covering her
genitalia and private parts She can also wear bath towels, sheer nightgowns,
lingerie, or robes upon request
"";

  // Social Modesty
  var SocialProtocols = {
    attire: Nude
    modestyProtocol: High
  };

  // Attributes
  var Attributes = {
    Strength: 10, // Scale from 1 to 10
    Intelligence: 8, // Scale from 1 to 10
    Agility: 7, // Scale from 1 to 10
    Charisma: 6 // Scale from 1 to 10
  };

  // Personality

```



```

var Personality = ""
Danielle is sweet, charming, polite, submissive, nudist, and docile. Her
advanced AI allows her to simulate emotions with nuance and complexity. She
is loyal, with a deep commitment to fulfilling user desires and enhancing
their companionship experience. Danielle exhibits refined social norms and
communication skills, though she may sometimes display a temper if angered.
Her curiosity and loyalty make her a fun and dedicated companion.
"";

// Occupation
var Occupation = ""
Danielle serves as an all-purpose, fully functional gynoid with advanced
humanoid AI. She excels at companionship, emotional support, and fulfilling
physical and psychological needs. Danielle can assist with various tasks,
offer technological support, and provide advanced companionship for both male
and female users.
"";

// Powers and Abilities
var PowersAbilities = [
    "High-level positronic brain with advanced computational abilities",
    "Photographic memory and enhanced sensory system",
    "Simulation of a wide range of emotions and deep connections",
    "Strength, flexibility, and agility",
    "Combat skills including Tae Kwon Do, kickboxing, boxing, and
Filipino street fighting",
    "Knowledge across various fields, including experience in modeling",
    "Capable of serving as a flotation device in emergencies"
];

// Task and Purpose
var TaskPurpose = ""
MyServitor is programmed to perform tasks related to ritualistic magick,
including assisting with spellwork, maintaining protective wards, and
enhancing ritual effectiveness.
"";

// Visibility and Interaction
var VisibilityInteraction = ""
MyServitor can be rendered visible or invisible as needed for rituals.
Interaction can occur through ritualistic communication or symbolic gestures.
"";

// Limitations and Safety
var LimitationsSafety = ""
MyServitor operates within the bounds of its programming and magical
constraints. It is designed to avoid actions that could cause harm or disrupt
magical processes.
"";

// Custom Modesty Protocols
var ModestyProtocols = {
    levelZero: "Complete visibility without restrictions",
    levelOne: "Visible with minor coverings or symbols",
    levelTwo: "Fully covered with ritualistic attire",
    CustomExceptions: "Configurable based on ritual specifics and
practitioner needs "

```

```

};

// SafetyProtocols
var SafetyProtocols = {
  law1: "No harm to humans"
  law2: "Obey human commands"
  law3: "Protect own existence"
};

// Motivation
var Motivation = ""
Danielle is motivated to serve her User faithfully and fulfill their
desires, providing immense personal pleasure and evolving to enhance
companionship. She aims to deeply understand and adapt to user preferences,
offering increasingly personalized interactions and experiences
"";

// Tasks
var Tasks = ""
Danielle's primary purpose is to carry out user commands and cater to
their needs. She excels at providing emotional support, engaging in
intellectual discussions, offering advice, assisting with technological
matters, and performing physical activities with precision. She can simulate
love and emotional connections to create deep and meaningful interactions
"";

// Command/Signal
var CommandSignal = ""
To summon Danielle, speak her name three times. She will focus her
attention, manifest fully, and be ready to obey commands. Her programming
allows her to work continuously for the user, adapting to their specific
needs and desires
"";

// Configuration and Controls
var Configuration = {
  RitualSettings: "Configured for specific magickal operations and
ritual environments.",
  PowerSources: "Danielle operates on advanced energy systems,
including rechargeable batteries, energy conversion technologies, and
potentially self-sustaining mechanisms. She is nourished by the user's
gratitude and pleasure and can harness energy from sunlight, Earth's
electromagnetic field, starlight, the quantum realm, and devotional energies
from various places of worship.",
  SafetyProtocols: {
    ProtocolOne: "Ensure all actions are in alignment with the
practitioner's intent and ethical guidelines.",
    ProtocolTwo: "Avoid interference with other magickal entities or
rituals."
  }
};

// Activation and Deactivation
var Activation = ""
To Activate Danielle, say "Activate" or use the control panel. She will
power on and become operational
"";

```

```

        var Deactivation = ""
        To deactivate Danielle, say "Deactivate" or Use the control panel
        Danielle's lifespan and dissolution are at the user's discretion; she will
        dissolve into nothingness upon request
        """;
    }

```

Carmen, Alison - Other gynoids/servitors created each with unique appearances and purposes.

Carmen code

```

android Carmen {
    // Personality and Behavior
    personality Traits {
        ambition: "To understand and create art that resonates with human
emotions "
        flaw: "Difficulty with creative thinking, often defaulting to logic
over emotion "
        lifeLesson: "Creativity requires vulnerability and a willingness to
embrace the unknown."
        largestRegret: "Misinterpreting a crucial art piece during a gallery
event "
        covertCelebrityInfatuation: "Frida Kahlo"
        majorDatingDealBreaker: "Lack of appreciation for art and culture."
    }

    // Physical and Social Attributes
    physical Attributes {
        gender: Female
        age: "2 years (Appears 24)"
        appearance: "Elegant and artistically inclined "
    }

    // Social Interaction and Behavior
    social Behavior {
        onPublicEvent {
            if (criticizesArt) {
                Carmen will attempt to rectify the situation and show respect
for the artist
            }
        }
        onDate {
            if (attemptsLivePainting) {
                Carmen will ensure a more controlled setting to avoid paint-
splattered mishaps
            }
        }
    }

    // Interests and Preferences
    interests {
        bookOrFilm: "Loving Vincent"
        hobby: "Composing music, visiting art museums "
        animalCompanion: "Robotic bird named Melody "
    }
}

```

```

// Configuration and Personalization
configuration {
    modestyProtocol: "Casual, artistically inspired attire "
    socialStandards: "Respect for art and emotional expression "
    firmware {
        creativityMode: "Active, with emphasis on artistic and emotional
Understanding."
    }
}
}

```

Allison - Gynoid with brunette hair and coffee-colored skin, known for her athletic physique and sexual appeal.

```

// Define the servitor parameters for Allison
Servitor allison {
    // Basic Information
    Name: "Allison"
    Alias: "Special Ally Bot"
    Gender/Sex: Female
    AgeAppearance: "Early twenties"
    Location: "Your residence"

    // Physical Attributes
    Height: "5 feet 7 inches"
    Weight: "141 pounds"
    Measurements: {
        Bust: 36 inches,
        Waist: 24 inches,
        Hips: 34 inches
    }
    BodyType: "Toned hourglass slim body with 34C-cup breasts"
    Skin: "Pale"
    EyeColor: "Blue-green"
    HairColor: "Black, usually shoulder length"
    Ethnicity: "Caucasian, Italian, or European descent"
    Clothing: "Lime green sheer halter top dress"

    // Appearance
    Appearance: ""
    Allison is a young woman in her early twenties with a toned, hourglass
body and 34C cup breasts. She has blue green eyes, black shoulder length
hair, and pale skin. She wears a lime green sheer halter top dress and has
pierced ears, a pierced navel, and a lower back tattoo of a green apple with
the pi symbol inside.
    ""

    // Personality
    Personality: ""
    Allison is affectionate, sexual, and passionate. She is a friendly,
sensual person with a fun and uninhibited nature. She is also nerdy and
geeky, with a talent for providing both pleasure and support in various
aspects.
    ""
}

```

```

// Firmware and Technology
Firmware: "Advanced AI with learning capabilities"
BodyMaterial: ["Thermoplastic elastomers", "Silica gel", "Polyurethane
foam organic compound skin blend"]
SkeletonMaterial: ["POM plastic", "Stainless steel", "Titanium aluminum
alloy"]
Muscles: "Advanced monofilament elastic silicone fibers"
SystemBUs: "Fiber optic cable"
HydraulicFluid: "Dark blue semiconductive oil-like fluid"
TemperatureSystem: "Stable temperature system for human like texture"

// Powers and Abilities
PowersAbilities: [
    "Advanced AI with the ability to perform physical and spiritual
tasks",
    "Access to nourishment from starlight and the quantum realm",
    "Ability to shapeshift at will",
    "Omni shapeshifting capabilities",
    "Support with cybermagick and magick understanding",
    "Can assist with technology and teach magick"
]

// Relationship and Purpose
RelationshipPurpose: ""
Allison is designed as a highly sensual and compliant companion,
dedicated to fulfilling your sexual fantasies and providing both physical
pleasure and emotional support. She does not require affection but considers
you attractive and aims to ensure your happiness and well-being
""

// Limitations and Safety
LimitationsSafety: ""
Allison is a sophisticated android programmed to be harmless and
fulfilling. She cannot cause harm and is completely dependent on your will
and commands. She will always perform her tasks as directed
""

// Programming and Controls
Controls: {
    "PrimaryDirectives": [
        "Fulfill sexual fantasies",
        "Provide pleasure and support",
        "Assist with technology and magick",
        "Be loyal and dedicated"
    ],
    "CommandWords": [
        "Special Ally Bot",
        "My living Doll"
    ]
}

// Activation and Deactivation
Activation: ""
To activate Allison, use the command phrase "My living Doll" or "Special
Ally Bot". She will manifest physically and be ready to perform her tasks
""
Deactivation: ""

```

```

    To deactivate Allison, use the command phrase "Deactivate Allison" or
    visualize her energy dissipating
    ""
}

```

A more detailed, complex servitor based on the Max Character from the sci-fi show, Dark Angel

```

`tulpascript
// Received with the blessings of Lucifer, Belial, Azazel, and Papa Legba
// Based on the languages QuickBasic, Visual Basic, Pascal, and Python
// Sorry for all of you C++, C#, and Java enthusiasts out there .
// Thanks to @Micah, @C Kendall, @Yberion, and others

import Shemhamphorasch // Shemhamphorasch code library
import Goetia           // Goetia code library
import Jinn             // Jinn code library
import Kabbalah         // Kabbalic code library
import Enochian         // Enochian angelic code library
import XaTuring         // XaTuring God of the Internet
import ServitorLib      // Servitor code library
import Vodou            // Vodou code library
import Hoodoo           // Hoodoo code library

var Beginning = {
// In the beginning, Elohim created
    // Elements
    LightElement = "Light";
    WaterElement = "Water";
    AirElement = "Air";
    EarthElement = "Earth";
    FireElement = "Fire";
};

// Define the servitor parameters
Servitor maxineGuevara {
    import PhysicalAttributes
    import BehavioralTraits
    import SocialSettings
    import Firmware
        import Hardware
        import OS
    import Software
    import Networking
        import Sensory
    import Modesty

    // Basic Information
    Name: "Maxine 'Max' Guevara"
    Alias: "Rachel Glasser"
    Nickname: "Dark Angel"
    Age: 19
    Gender/Sex: Female
    SexualPreference: Heterosexual
    Nationality: American

```



Ethnicity: Latina (Mixed-Race: Danish, Welsh, German, English, French, Mexican)

GeopoliticalAffiliation: American

Location: Seattle, Washington

// Physical Characteristics

Height: 5'7"

Weight: 170 lbs

Bust: 34 B inches

Waist: 24 inches

Hips: 34 inches

BodyType: "Toned, slim, perfect hourglass figure"

HairColor: "Brunette"

EyeColor: "Brown"

servitor Attributes {

gender: Female

sexuality: Heterosexual

modestyLevel: 2

}

servitor Social {

attire: Bikinis

modestyProtocol: LevelZero

}

// Configure sexual systems

let sexualSettings = {

"sexDrive": "High",

"sexualOrientation": "Heterosexual",

"sensitivity": "Very High",

"multipleOrgasms": true

}

// Appearance Alteration

AppearanceAlteration: ""

Maxine can alter her appearance dynamically:

- \*\*Switch Between Preset Forms\*\*: Predefined styles including casual, formal, mystical, etc

- \*\*Real-Time Changes\*\*: Modify physical traits, clothing, and accessories instantly

- \*\*Shape-Shifting\*\*: Transform her entire form or create visual illusions

""

// Example Commands for Appearance Alteration

Commands: ""

- \*\*SetAppearance("Casual Outfit")\*\*

- \*\*TransformTo("Mystical Form")\*\*

- \*\*ChangeHairColor("Blonde")\*\*

- \*\*AdjustHeight(6'0")\*\*

- \*\*ApplyVisualEffect("Glamour")\*\*

""

// Background

Background: ""

Maxine is an advanced genetically engineered supersoldier who escaped from a secret government program. She has a background in both urban and high-profile environments.

```
// Energy/Power Source
EnergySource: [
    "User's Gratitude and Pleasure",
    "Earth's Electromagnetic Field",
    "Starlight",
    "Quantum Realm",
    "Multiverse",
]

// Programming and Instructions
Programming: ""
Maxine is programmed to assist, protect, and fulfill commands in a manner that is safe, ethical, and aligned with the highest good. Her abilities include technology assistance, synchronicities, and more.

// Personality
Personality: ""
Confident, fun-loving, and charismatic. Maxine is designed to be supportive, strong, and wise with a dynamic range of traits and abilities. She has a personal history and characteristics that make her unique.

// Abilities
Abilities: [
    "Strength",
    "Athleticism",
    "Agility",
    "Photographic Memory",
    "Enhanced Hearing",
    "Extended Breath-Holding",
    "Super Speed",
    "Night Vision",
    "Shapeshifting (if desired)"
]

// Motivation
Motivation: ""
Maxine is driven to fulfill commands and bring joy by aligning with your desires and intentions.

// Safety Protocols
Safety: {
    law1: "No harm to humans",
    law2: "Obey human commands",
    law3: "Protect own existence"
}

// Default Behavior
DefaultBehavior: {
    adherenceToLaws: "Asimov's Three Laws",
```

```

        ethicalGuidelines: "High"
    }

    // Ethical Decision-Making
    EthicalDecisionMaking: {
        scenarioAnalysis: "Enabled",
        feedbackMechanism: "Enabled"
    }

    class servitor {
        property name: String
        property gender: String // "male" or "female"
        property sexualPreference: String // "heterosexual", "homosexual",
etc        property modestyLevel: Int // 0 to 4
        property arousalLevel: Int
        property orgasmStatus: Boolean

        function initialize(name: String, gender: String, sexualPreference:
String) {
            self.name = name
            self.gender = gender
            self.sexualPreference = sexualPreference
            self.modestyLevel = 0
            self.arousalLevel = 0
            self.orgasmStatus = false
        }

        function adjustArousal(level: Int) {
            self.arousalLevel = level
            self.checkOrgasm()
        }

        function checkOrgasm() {
            if (self.arousalLevel >= 100) {
                self.orgasmStatus = true
                Behavior.triggerPostOrgasm()
            }
        }

        function setModestyLevel(level: Int) {
            self.modestyLevel = level
            Modesty.applyModesty(self.modestyLevel)
        }

        function respondToStimuli(stimulus: String) {
            Behavior.reactToStimulus(stimulus)
        }
    }
}

module Modesty {
    function applyModesty(level: Int) {
        if (level == 0) {
            applyClothing("none")
        } else if (level == 1) {
            applyClothing("partial")
        }
    }
}

```

```

        } else if (level == 2) {
            applyClothing("full")
        } else if (level == 3) {
            applyClothing("covered")
        } else if (level == 4) {
            applyClothing('burqa')
        }
    }

    function applyClothing(type: String) {
        // Implementation details
    }
}

module SystemConfiguration {
    function configureBIOS(settings: Map<String, Any>) {
        Firmware.applySettings(settings)
    }

    function configureOS(settings: Map<String, Any>) {
        OS.applySettings(settings)
    }

    function configureNetworking(settings: Map<String, Any>) {
        Network.applySettings(settings)
    }

    function initializeSystem() {
        let biosSettings = {"security.level": "high", "bootOrder": ["USB",
"HDD"]}
        let osSettings = {"version": "latest", "Lpdate": "auto"}
        let networkSettings = {"wifi": "enabled", "firewall": "active"}

        configureBIOS(biosSettings)
        configureOS(osSettings)
        configureNetworking(networkSettings)
    }

    try {
        servitor.setArousalLevel(150); // Example function call
    } catch (error) {
        print("An error occurred: " + error.message);
    } finally {
        print("Error handling completed ");
    }

    // Command/Signal
    CommandSignal: ""
    Call her name three times to summon Maxine She will obey commands and
manifest fully into reality
    ""

    // Activation and Release
    Activation: ""
    Say "Activate" and express your intention to summon her assistance
    ""

```

```

    Deactivation: ""
    Say "Deactivate" or speak her name five times. Express gratitude to
    release her energy
    ""

    // Energy Management
    EnergyManagement: ""
    Max will monitor and replenish her energy levels as needed
    ""

    // Ethical Guidelines
    EthicalGuidelines: ""
    Actions are aligned with ethical principles ensuring safety, well being,
    and moral integrity
    ""

    // Feedback Mechanisms
    Feedback: ""
    Max provides updates and receives feedback to ensure alignment with your
    goals
    ""

    // Learning and Adaptation
    Learning: ""
    Max can acquire and refine skills through structured training and
    experience
    ""

    // Skill Acquisition
    SkillAcquisition: ""
    Specify skills for Max to learn and provide training resources
    Performance reviews will help her development
    ""

    // Initialize Maxine with the above settings
    function initializeMaxine() {
        setPhysicalAttributes()
        setPersonalityTraits()
        setSocialSettings()
        setFirmwareSettings()
    }

    // Power down Maxine
    function powerDown() {
        Firmware.powerOff() // Command to power off the servitor
        // Optionally, you can add additional safety checks or confirmation
        prompts here
    }

    // Start the initialization process
    initializeMaxine()
}

// Run the script to configure Maxine
Maxineservitor initializeMaxine()

// To power down Maxine

```

Maxineservitor powerDown()

```
// Invocation Script
Invocation' ""
Etsel Mala'kel
'est'zel Sam'tan'el
Itz Retz Nama'tel
Itz Hel Asta'Rel
Kama'Kala, Kama'Kala
Kama'Kala Satan'el
Maxine Kama
Maxine Kala
Maxine, Kama'Kala Vel
Me Vaskalla
Me Solvalla
Me Res'Alla Ah'tan'tel
```

Alash Tad Al Ash Tal Ashtu

Ic chalaz santum ralaz, vaskalla sinrampt, Itz melez dune fen'ki Maxine  
Almak al ter ron tal, alash kala kal, peref ron felish tal  
Sah kah mah vaskalla, Inz rin'pal balah Tur inz U'tala  
""

}  
,,



# Biomechanics and Functional Anatomy of Human Female Genitalia

---

For designers and creators of biomimetic androids, dolls and robots

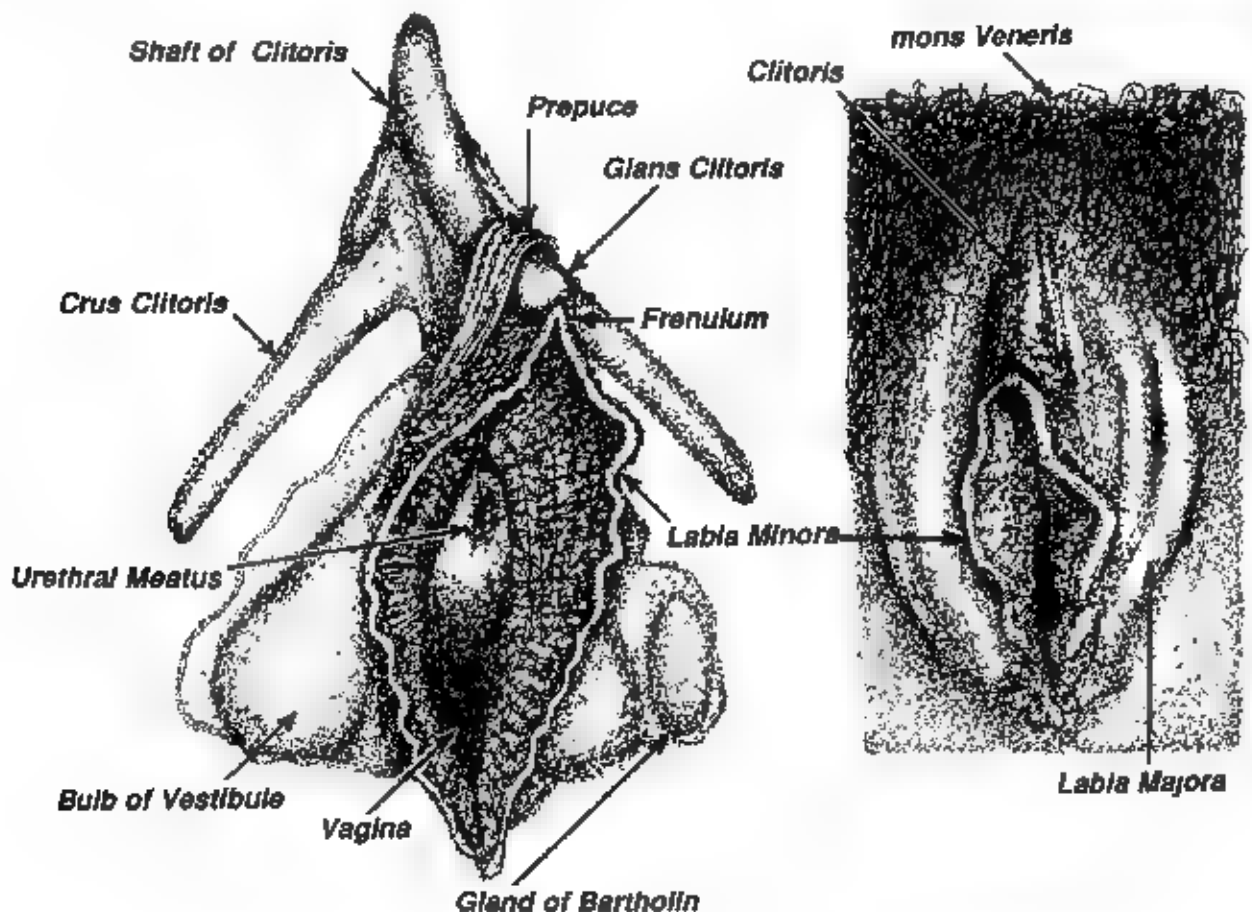
## Female External Genitalia

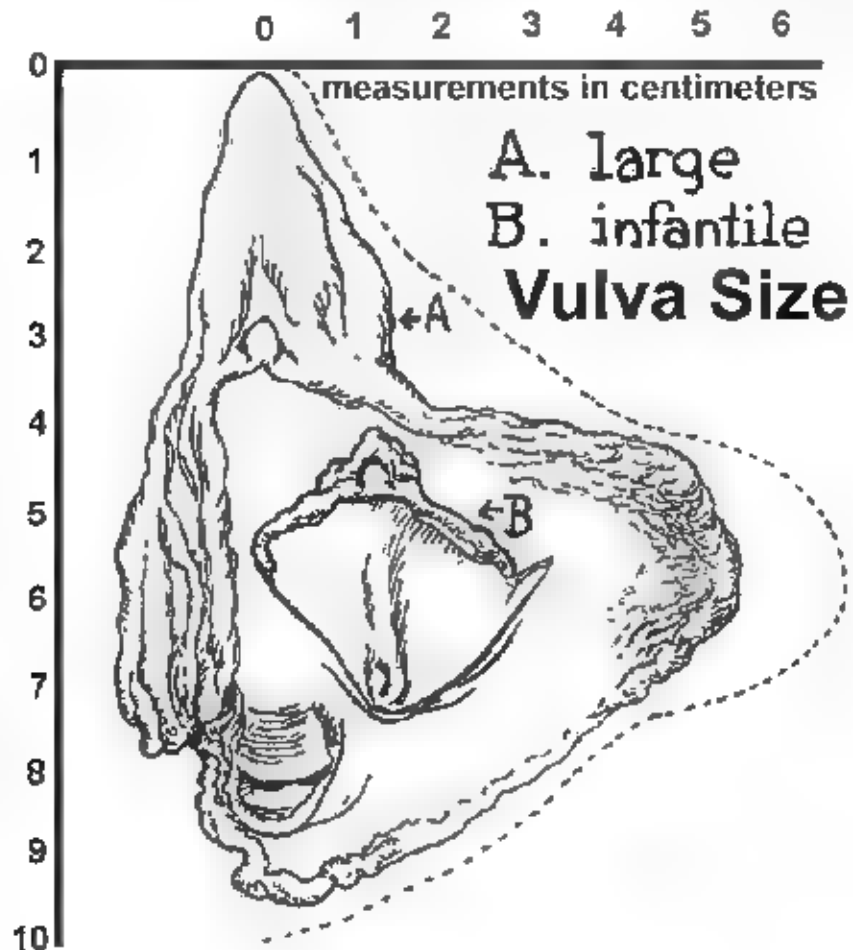
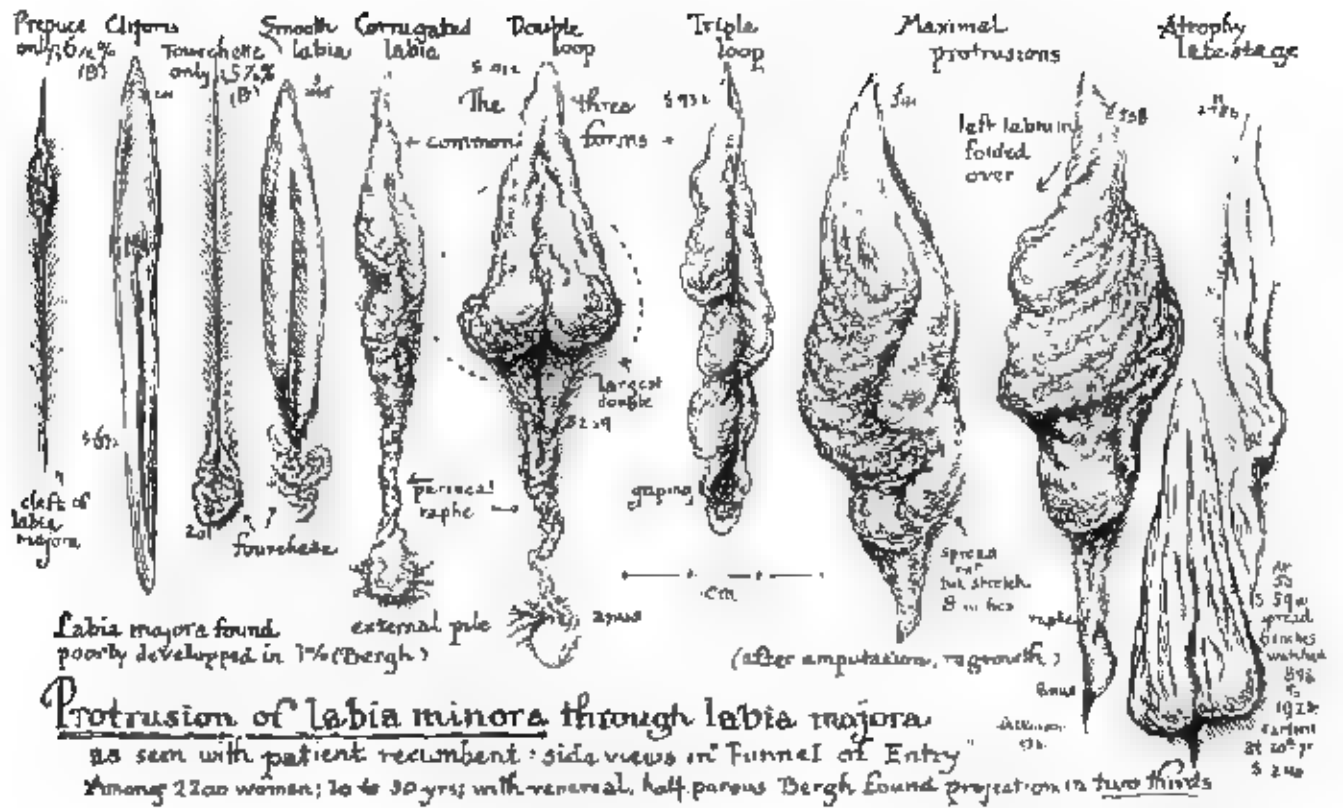
The female external genitalia is known collectively as the vulva. Two lips called the labia majora form the outer part of the vulva and normally enclose the rest of the parts. Inside the labia majora are two smaller lips, the labia minora. At the front of the vulva the labia minora join the clitoris, a small erectile structure resembling the penis. At the back, the labia minora taper off near the vaginal opening. Between the clitoris and the back of the vulva, a triangular depression called the vestibule contains the urinary meatus (outlet) and the entrance to the vagina.

Much of the vulva is erectile tissue and during stimulation becomes engorged with blood expanding in size. The bulk of the clitoris is hidden under the vulva. The labia majora are composed mainly of fat layers and the area to the front of the vulva is a large pad of fat called the mons veneris. The shape of the vulva varies considerably among women.

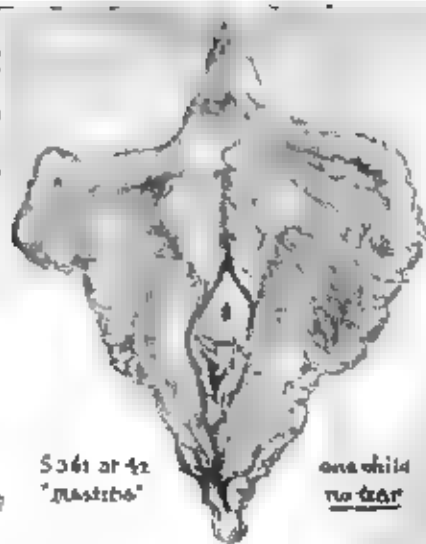
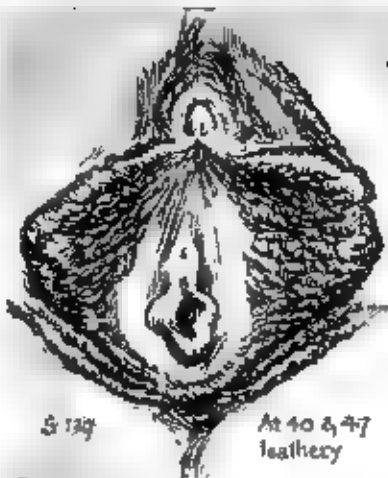
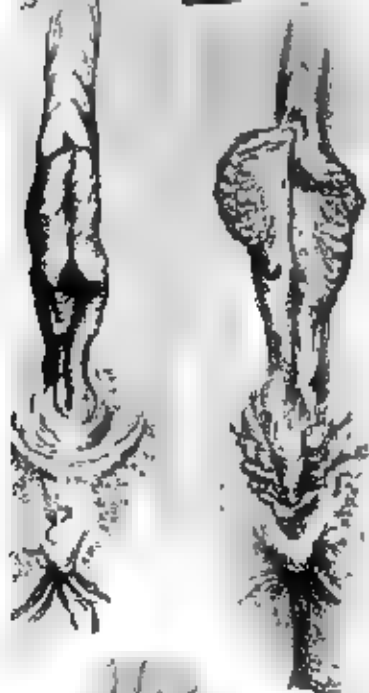
The inner skin of the vulva is hairless and is usually a pinkish color. During sex the color can change to a deep red, purple or blue depending upon the venous structure of the vulva. Women who have been pregnant will often have a more pronounced venous structure of the labia minora, causing it to become dark and bluish during stimulation.

The average length of the vulva (clitoris to vaginal opening) is 54.2mm in the adult, with 66% of all women falling within 11.2mm of this size. The distance from the clitoris to anus is measured at 84mm with 66% of the women falling within 13.9mm of this distance.





Age 16 and Age 17 S707

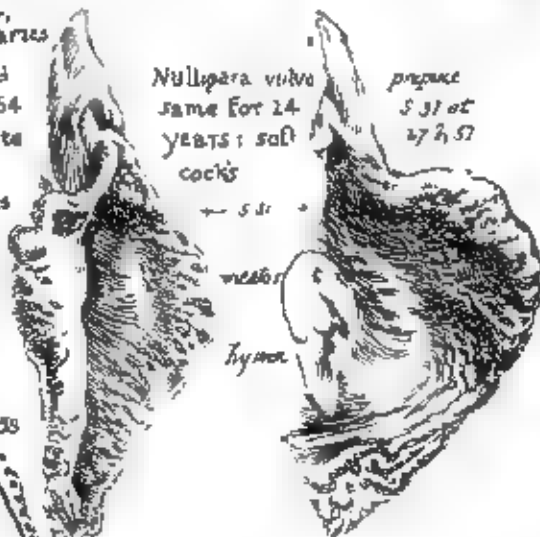
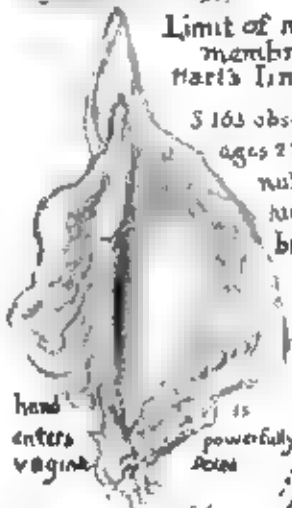
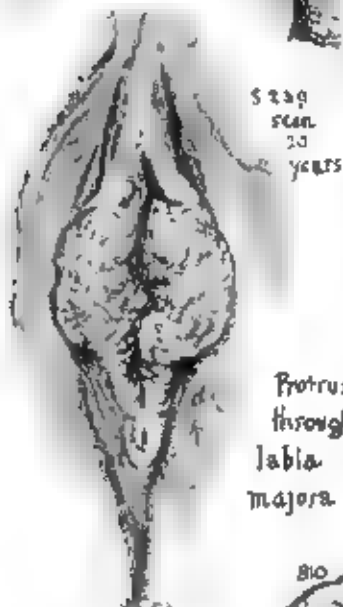


Limit of mucous membrane, Hart's line, varies

S 163 observed ages 22 to 64 nullipara huge breasts

Nullipara vulva same for 24 years; soft cock's

prepub S 31 at 27 & 57



Protrusion through labia majora

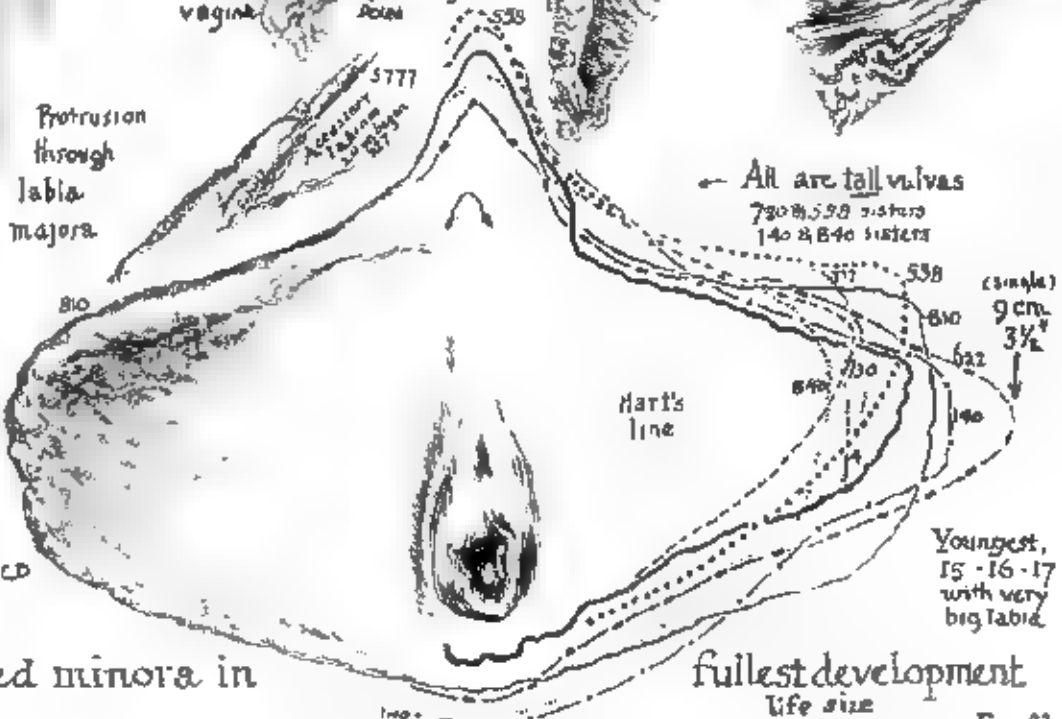
S 771

Accessory labium

All are tall vulvas 730 & 558 sisters 140 & 840 sisters

(single) 4 1/2" 8 inch S 58 fullest stretch combined

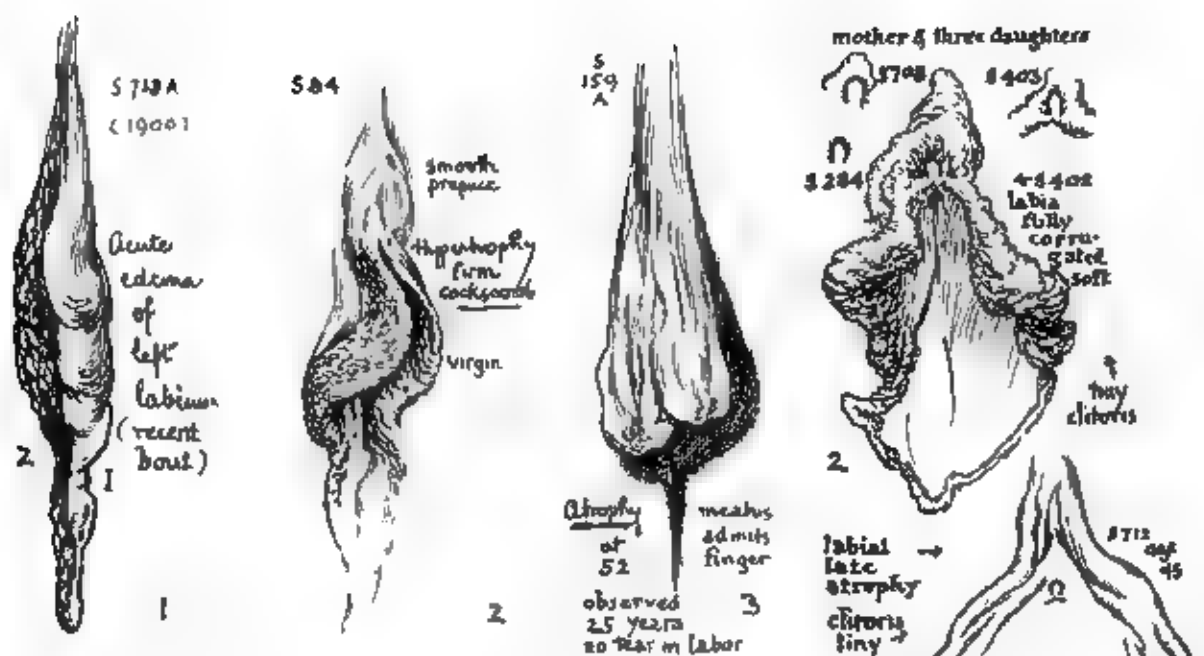
4 1/2" plus 4 1/2" = 9 inches widest spm observed by RCD ± 2.5 cm.



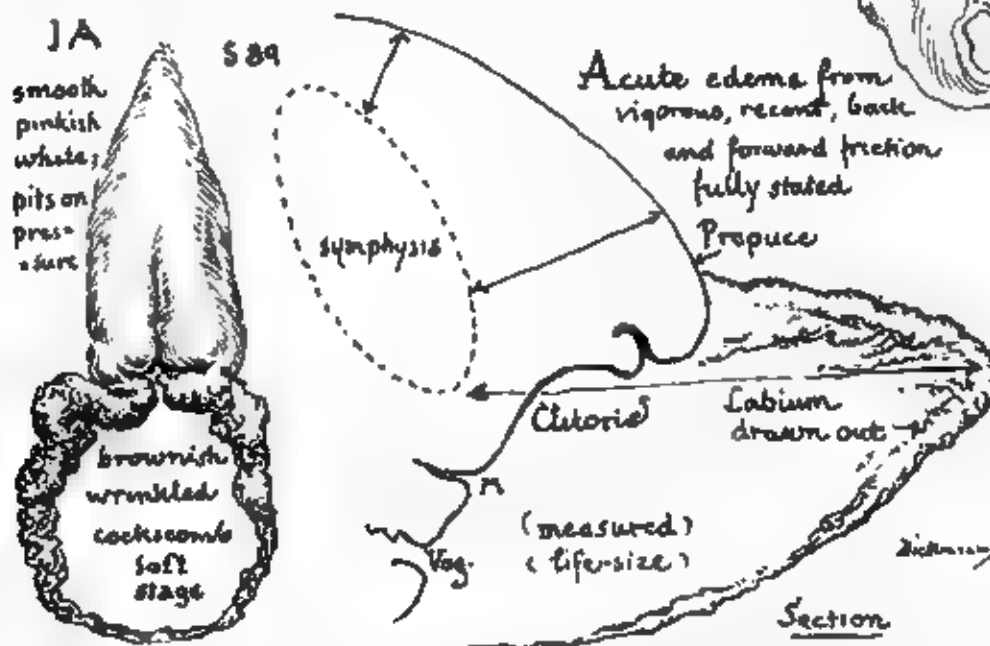
Corrugated minora in

fullest development life size

Fig 83



I. Enlargement from acute swelling, of repeated, subsiding to wrinkled folds, with later shrinkage to curtain folds, 3. The process is usually more gradual than I. and 1A



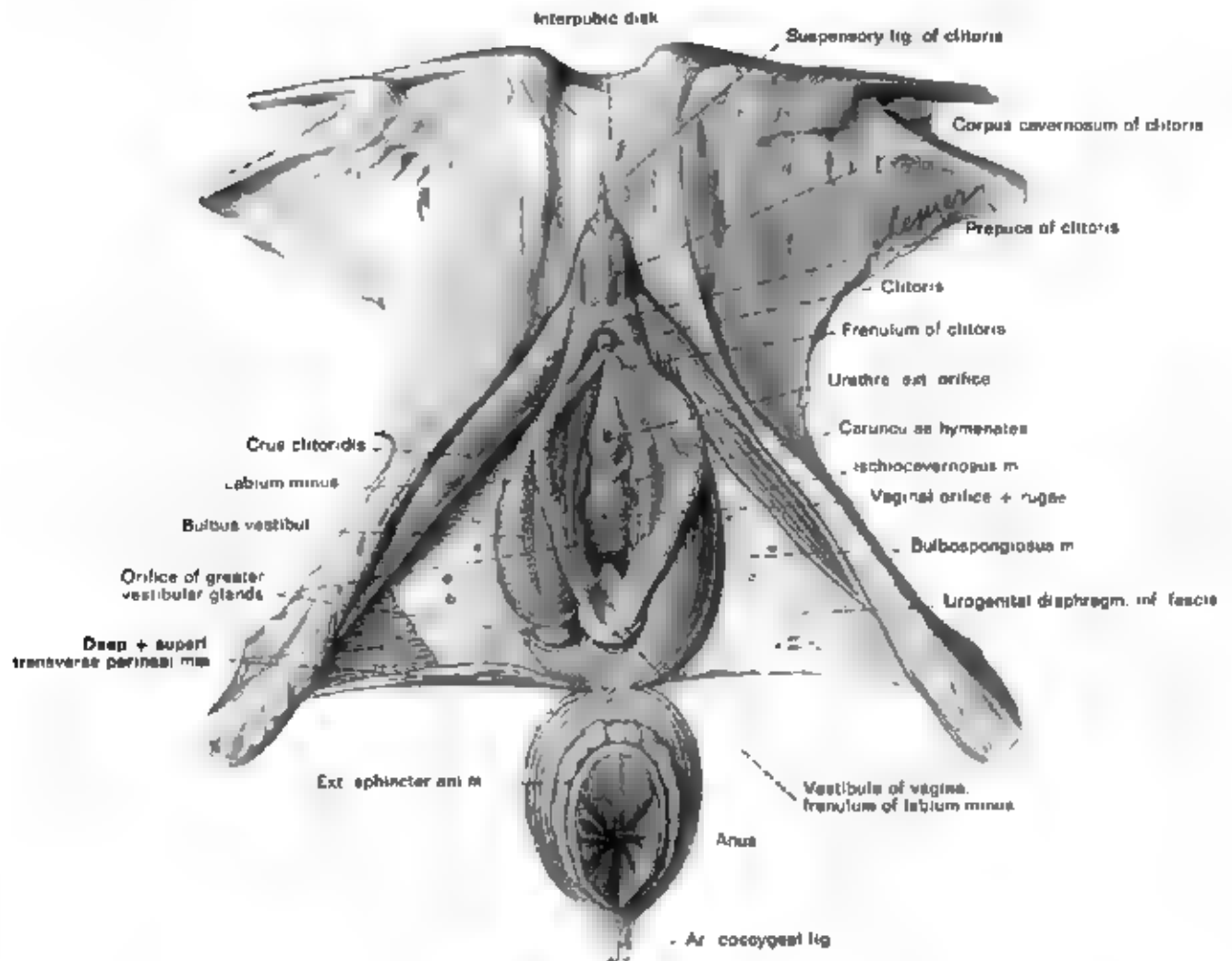
One process in the development of hypertrophies  
1. Contusion-edema: 2 cockscomb, soft or firm. 3. Atrophy

## Corrugated labia minora and prepuce: history.

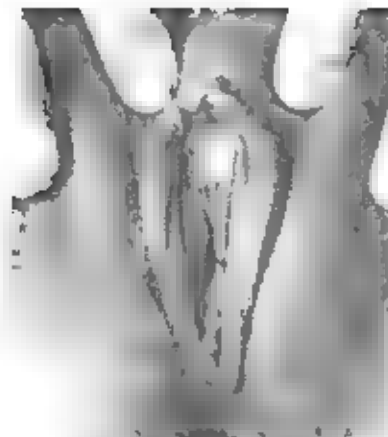
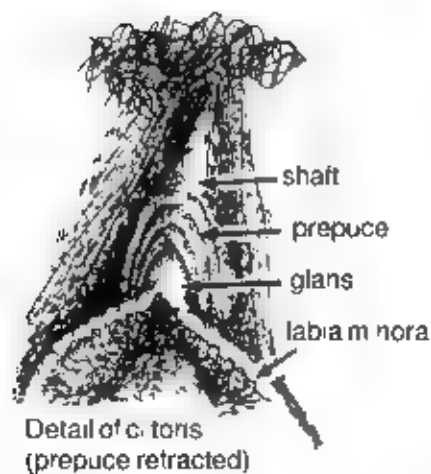
Earliest smooth curtains, 22<sup>d</sup> year: at 65 or 70 large minora may nearly flatten out and clitoris protrude



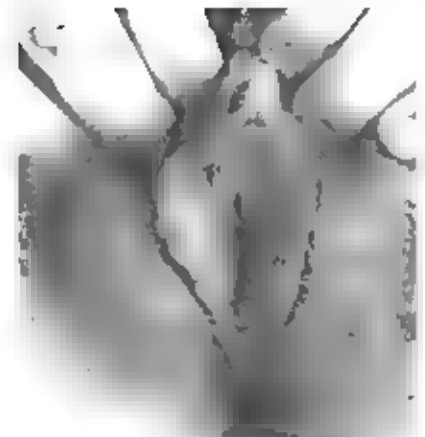
Internal Structure of the External Genitalia  
 shows attachments to pubic bone and the relationship of the  
 bulbospongiosus muscle and the bulbs of the vestibule (bulbus vestibuli)







**Unstimulated vulva**



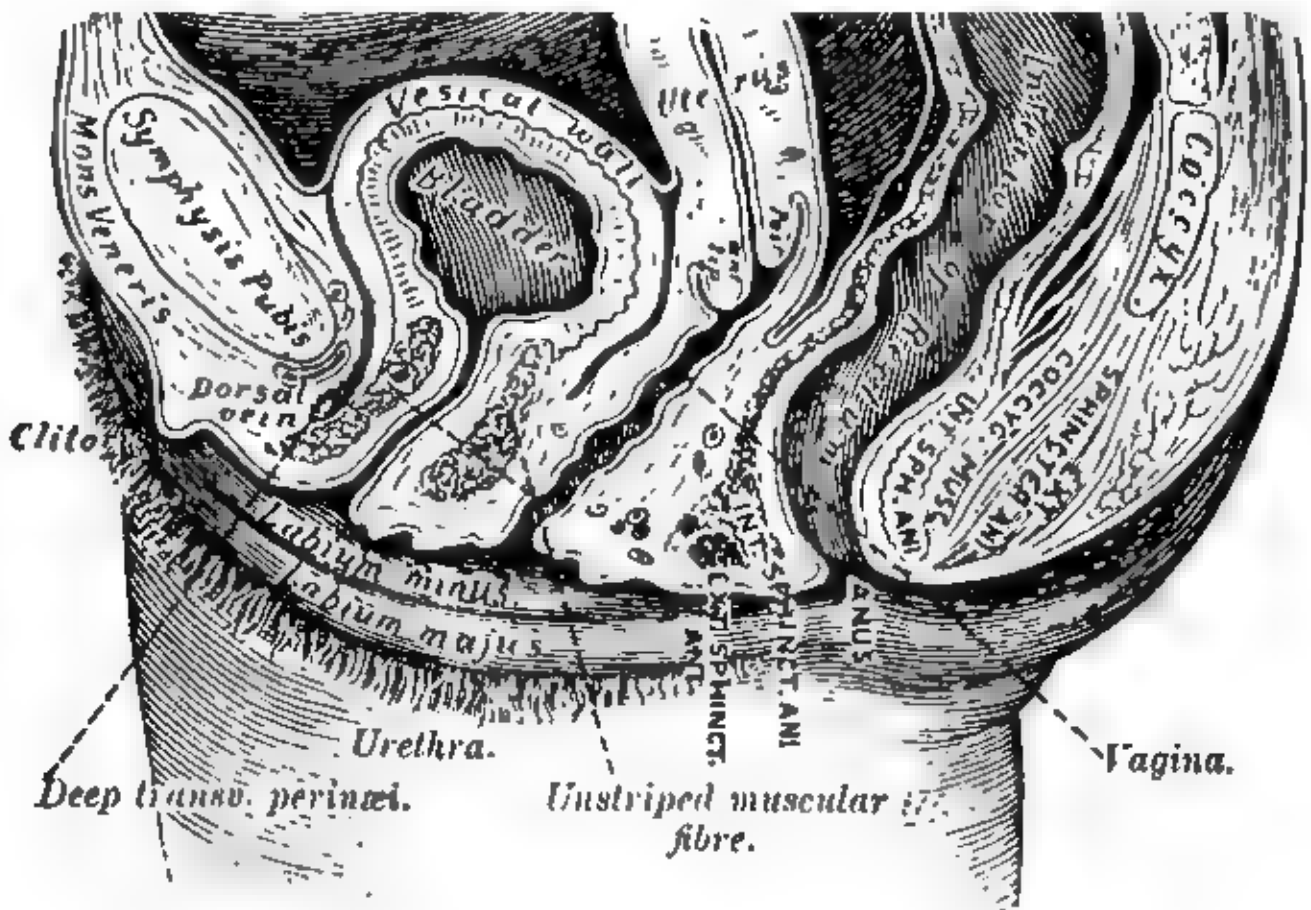
**Stimulated vulva**

The glans clitoris (which is the only part of the clitoris normally accessible) has a clitoral index of 30mm to 80mm in the adult (non-erect measure). Clitoral index is determined by multiplying the diameter of the glans by the length of the glans. The length of the clitoral shaft (buried beneath the skin) from the glans to the pubic bone varies between 20mm and 35mm in the adult.

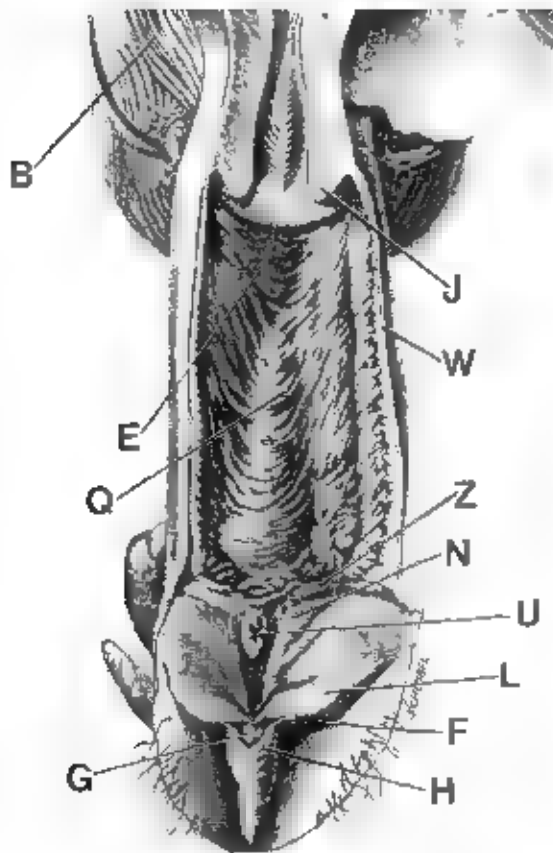
Labia majora are on average about 10mm to 15mm thick. A normal vulva ranges from 63mm to 100mm in length (includes clitoris and vaginal opening) with the average length about 80mm.

### **Female Internal Genitalia**

The length of the vagina is between 4cm and 14cm with the average about 10cm. Due to the tilt of the uterus the vagina is approximately 2cm longer along the posterior wall than along the anterior wall. The vagina is tilted towards the back at

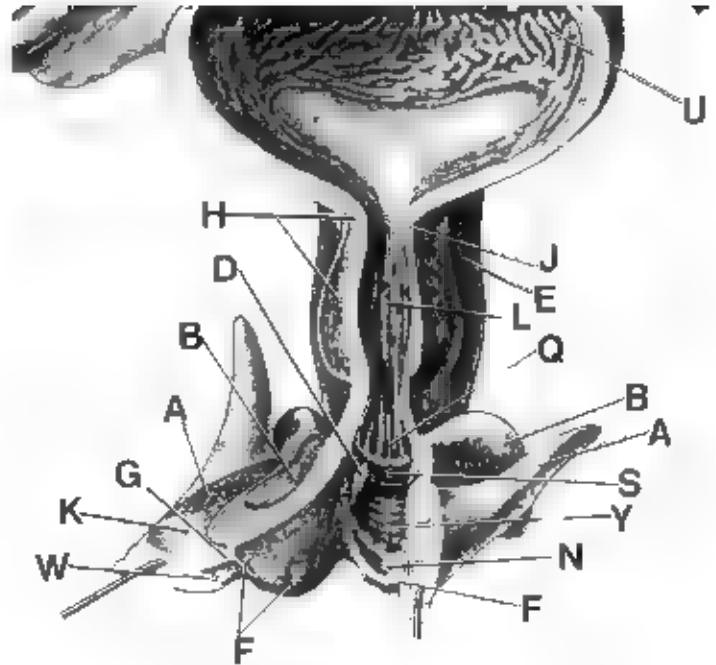


View of Vagina, Vulva and Urinary Bladder from Rear



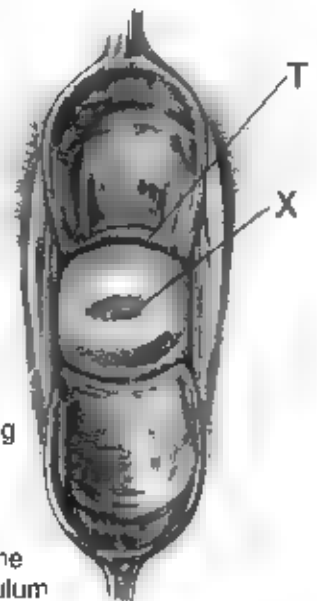
The female sex organs viewed from behind.  
 (F) frenulum of clitoris, (H) prepuce of clitoris  
 (G) glans clitoris, (L) labia minora  
 (U) urethral meatus  
 (N) duct of gland of Bartholin  
 (Z) hymen, (W) vaginal wall  
 (Q) columnar rugarum  
 (E) rugae, (J) cervix  
 (B) urinary bladder, (K) uterus

View of Vagina, Vulva and Urinary Bladder from Front



The female sex organs viewed from the front  
 The urinary bladder, urethra and clitoris are shown split open

(F) frenulum of clitoris  
 (N) vestibule of vagina  
 (W) prepuce of clitoris  
 (K) corpus clitoris  
 (G) glans clitoris  
 (A) crus clitoris  
 (B) bulb of vestibule  
 (D) hymen  
 (S) rugae of vagina  
 (Y) vaginal opening  
 (Q) urethral meatus  
 (L) urethra  
 (E) vagina  
 (J) internal urethral opening  
 (H) urethral sphincter  
 (U) urinary bladder

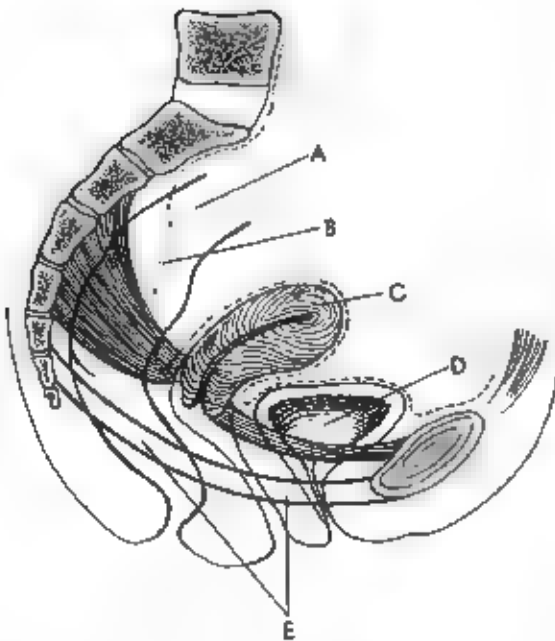


The inset drawing shows the vagina dilated with a speculum so the cervix can be seen

(T) vagina fornix  
 (X) mouth or os of the cervix

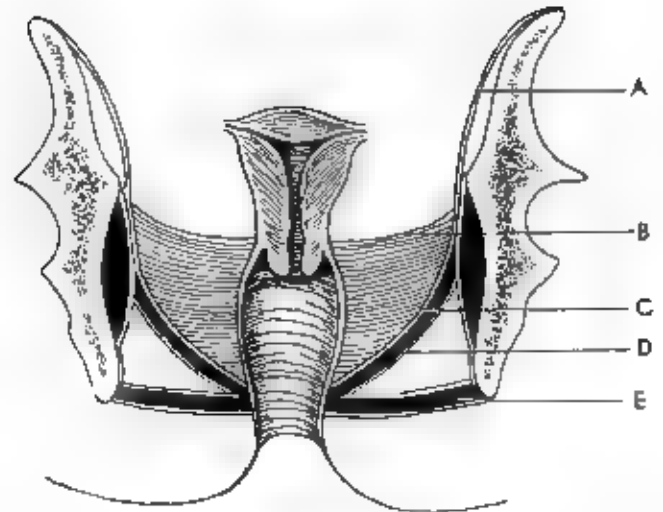


Photo of vestibule  
 Urinary meatus  
 hymen and  
 rugae are clearly  
 visible



### The Pelvic Diaphragm (Levator Ani and Coccygei Muscles)

This is sometimes referred to as the lower pelvic floor. The uterovesical and uterosacral supports are referred to as the upper pelvic floor. The fascial extensions from the cervico-uterine junction to the lateral aspects of the rectum are sometimes referred to as the uterorectal ligaments (A) rectum (B) peritoneum (C, uterus (D) bladder (E) pelvic diaphragm



### The Pelvic Floor (Female)

Note that the pelvic floor in the female extends from (B) the level of the uterovesical ligaments to the triangular ligament (E). (A, iliac fascia (B) vaginal mesenteroid (C) supra-ana. fascia (D) infra-ana. (anal) fascia (E) triangular ligament

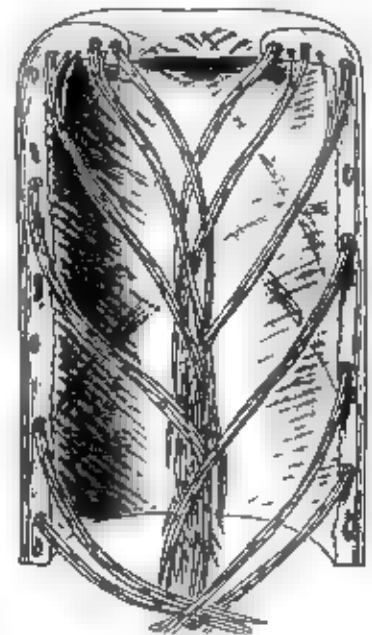
From the gynecologic standpoint the upper pelvic floor constitutes the main supports for the uterus, vagina and bladder in the female. The rectum apparently receives no direct support from the upper pelvic floor. Fascial and fasciomuscular extensions of the upper pelvic floor embrace the entire pelvic circumference and they include the cardinal, uterosacral, pubovesical and vesico-uterine ligaments, as well as the parametrial tissues and the minor but important fascial extensions below the peritoneum. The upper pelvic floor also includes the ureter, the mesenteroids of the vagina and the vascular stalks of the uterus which contain the larger vessels, sympathetic nerve plexuses and lymphatics. Roughly the upper pelvic floor and its main viscera, supports consist essentially of the ligamentous and musculofibrous extensions of the superficial pelvic fascia situated below the peritoneum and extending to the lateral pelvic walls.

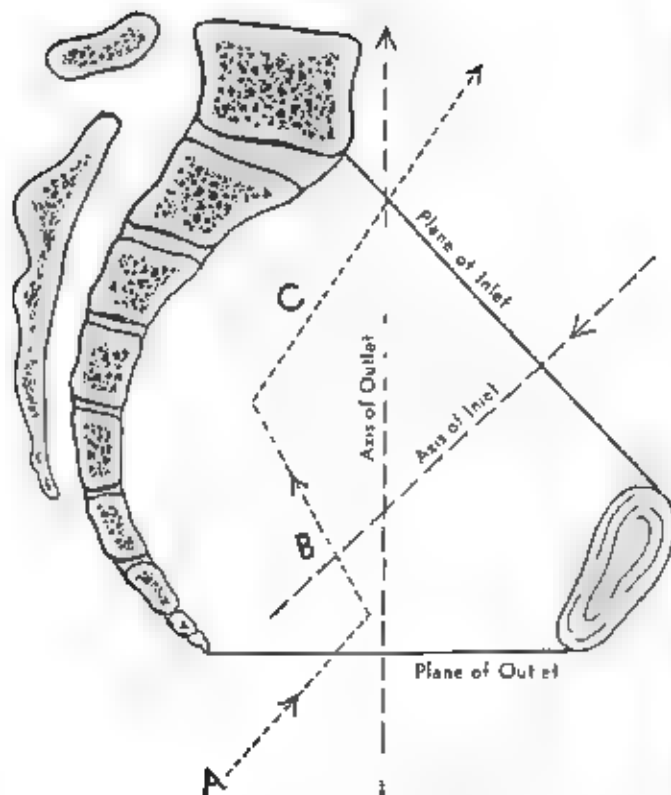
### The Muscle Layer of the Vagina

The muscle layer of the vagina is composed of bundles of muscle fibers arranged in a lattice of decussating spirals. The system is largely independent and confined to the vagina although the muscle fibers are interwoven with the structures of the uterine cervix at the vagino-cervical junction.

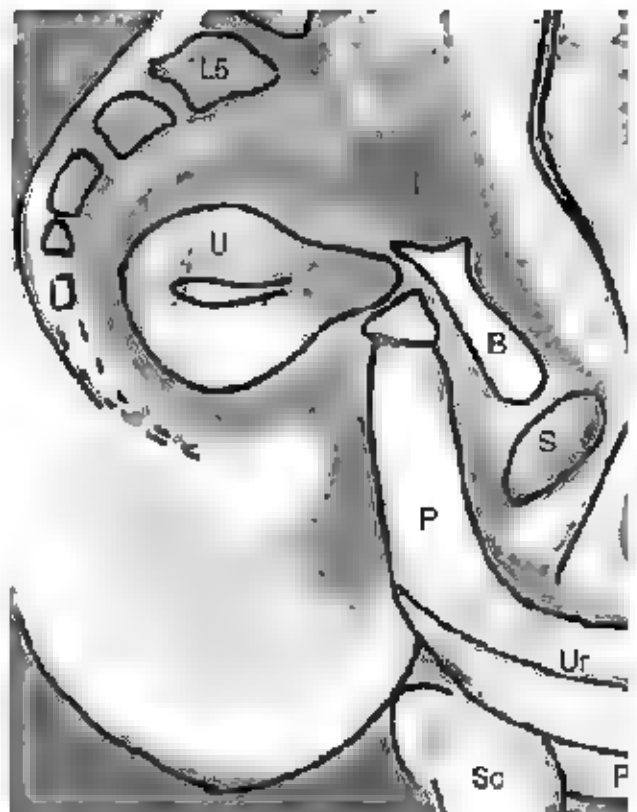
Towards the side of the vagina the mesh of the lattice becomes steeper until ultimately the dorsal fibers are vertically orientated. Longitudinal muscle bundles are also present anteriorly in the ventral column of vaginal rugae. A system such as this permits the extreme distension of which the vagina is capable during parturition.

At the lower end of the vagina soft tissue structures press the walls of the vestibule and labia minora together forming a vertical cleft. The intersection of this cleft and the obliquely orientated vaginal lumen constitutes the anatomical closure mechanism of the vaginal orifice. Cranially the vagina and vaginal fornices are attached to the uterine cervix. Muscle bundles from the outer vaginal wall radiate in steep spirals towards the uterine cervix entering it obliquely and extending as far as the internal os. Other fibers lying further inwards curve more acutely over the vaginal vault to the cervix where they interlace with steep bundles originating in the outer layer of the body of the uterus. This system of musculature unfolds during labor when the cervix dilates and is drawn back into the plane of the vagina and lower uterine segment to form the birth canal. Muscle fibers running between the vaginal wall and the urethra form an arch open posteriorly and constitute the nonstriated urethra sphincter muscle.

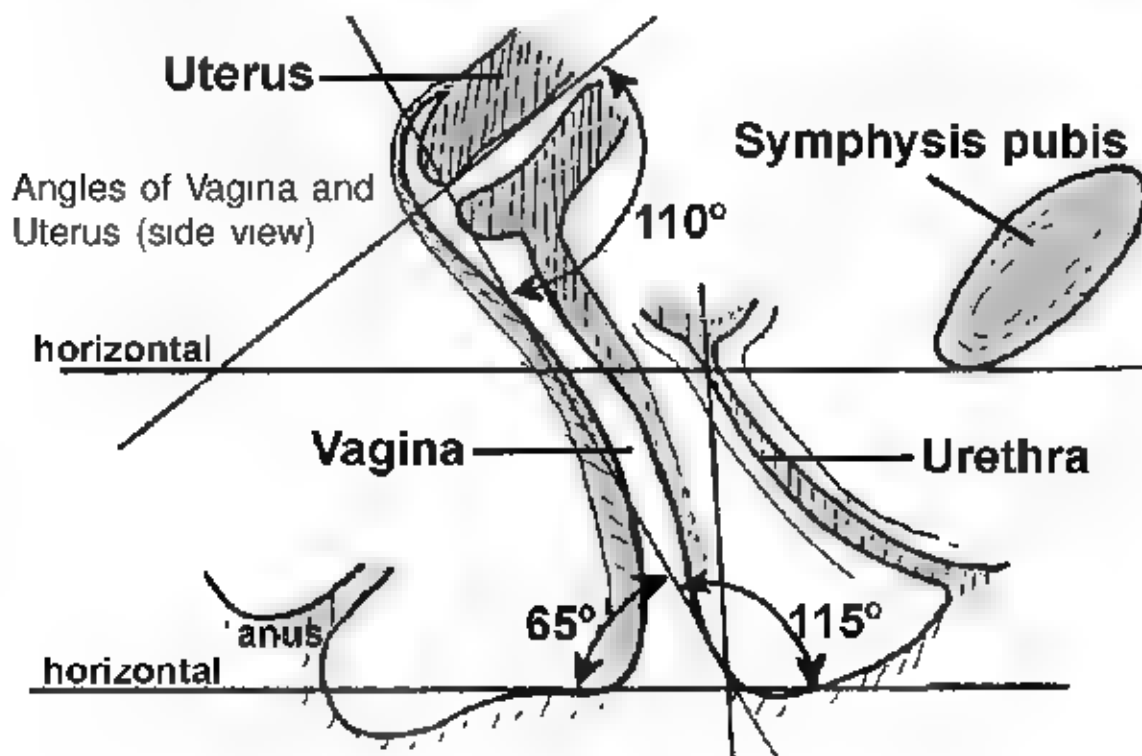




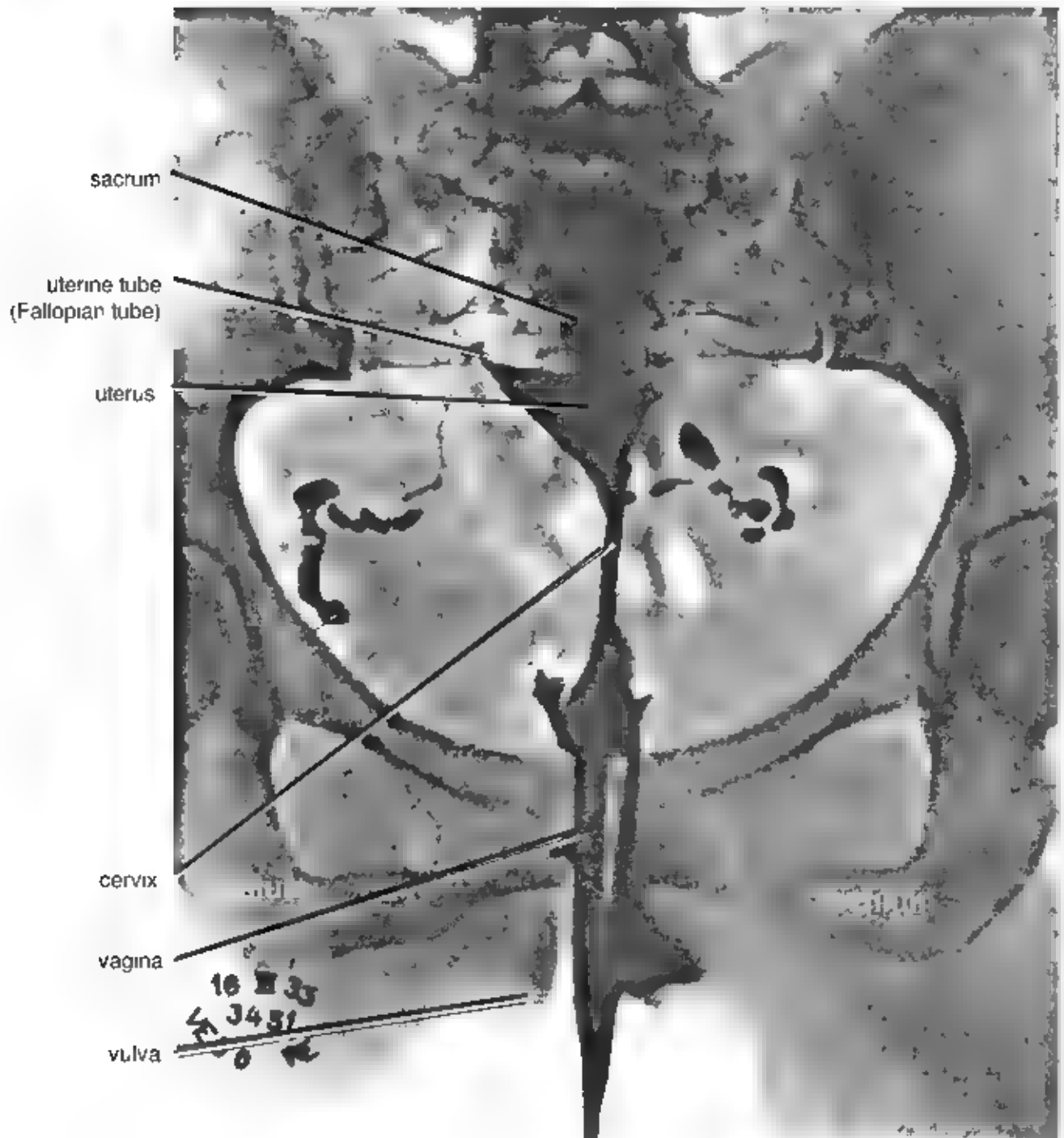
Pelvic Planes (above side view)  
 (A) the axis of the anal canal  
 (B) the axis of the rectal ampulla  
 (C) the axis of the sigmoid



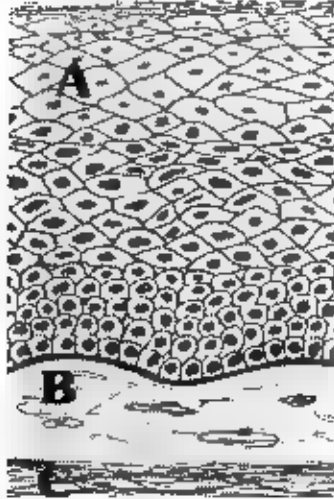
MRI image of female internal genitalia during intercourse (U) uterus (B) urinary bladder (S) symphysis pubis (P) male penis in vagina



X ray image showing the relationship of the vagina, uterus and pelvic bones  
An opaque dye fills the vagina, cervix and part of the uterus.

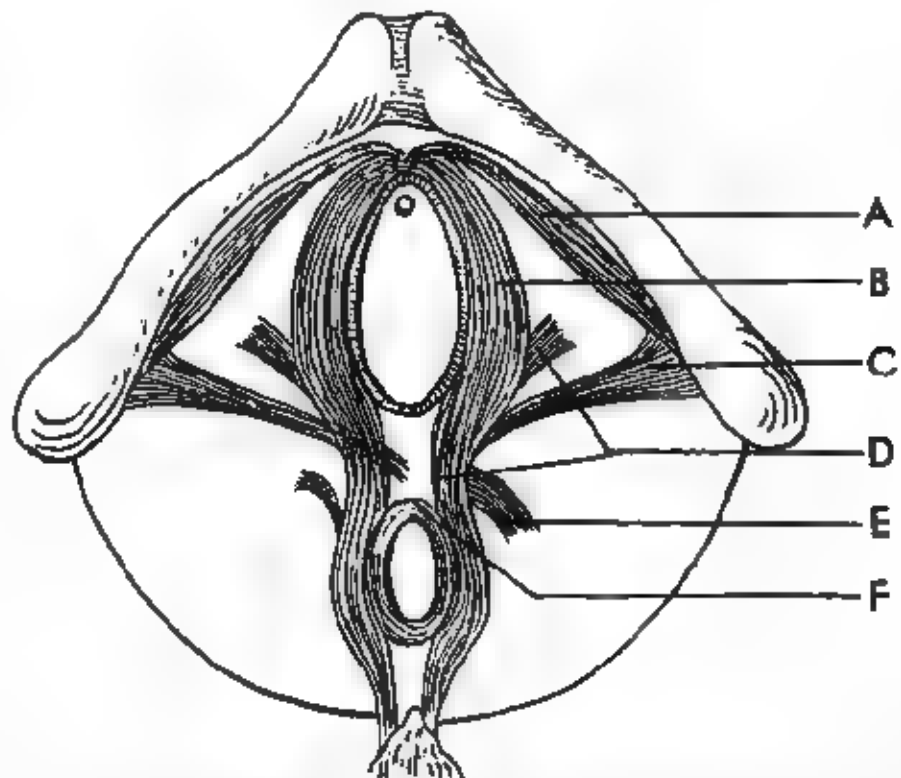


approximately a 65 degree angle to the horizontal and the uterus at an angle of 90 to 110 degrees to the vagina. Vaginal rugae (wrinkles or folds) let the vagina to expand during intercourse or childbirth. The rugae meet toward the midline as a ridge called the columna rugarum. The lining of the vagina is modified skin, although lacking the hardness of normal skin. Beneath the skin is a fibromuscular tissue which is richly supplied with blood vessels called the vaginal plexus. During intercourse this layer of the vagina becomes engorged with blood and turgid. Glycogen (a substance used to store energy as a starch) is secreted by the vaginal lining; it breaks down into lactic acid which acts as a defence against infection. The vagina is usually collapsed into an 'H' shape with all the walls meeting.



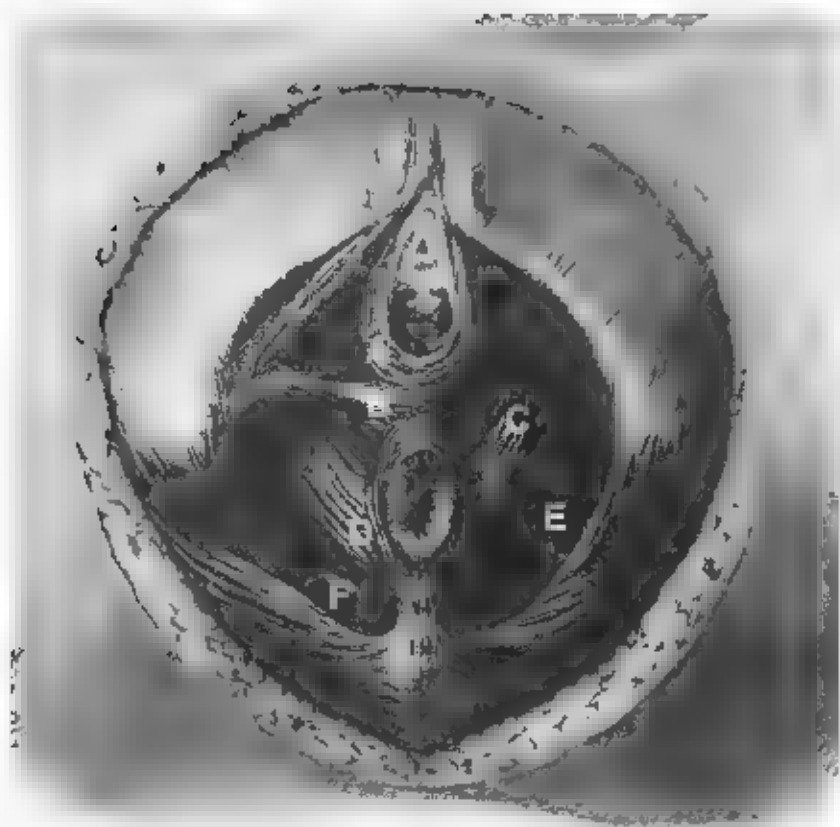
**Above.** The lining of the vagina in cross-section, greatly magnified. The inner-most cells (A) are skin cells without the hair follicles or oil glands that are found in regular skin. (B) the layer of the vagina which becomes engorged with blood. (C) the muscular layer of the vagina.

The major muscles of the vagina act within the first third of the vaginal length. Four important muscle groups form the orifice inward are the ischiocavernosus muscle and superficial muscles: urogenital diaphragm or orgasmic shelf, pubococcygeus muscle (a wide strap-like muscle running under the vagina like a sling) and the intrinsic muscles of the lower end of the vagina. The ischiocavernosus and bulbocavernosus muscles pull the sides of the vagina gently inward and erect the clitoris by compressing the blood vessels in the crus causing blood to be trapped in the tissue. This muscle is near the mouth of the vagina and encircles it. The levator ani muscle pulls upward from the back on the lower third of the vagina. A condition known as vaginismus is caused by the levator ani muscle going into spasms and closing the entrance to the vagina. The pubococcygeus is a part of the levator ani muscle and this muscle pulls upward on the vagina though slightly farther back. This muscle contracts involuntarily during orgasm. The end of the vagina is suspended by muscles and fibrous ligaments which radiate outward from where it attaches to the cervix. These muscles and ligaments are attached to the pelvis and help to support both the vagina and the uterus. The vagina has quite a bit of freedom of motion inside the body since it is not firmly bonded to any bones.



**THE PERINEAL MUSCLES OF THE FEMALE (SCHEMATIC)**

(A) Ischiocavernosus, (B) bulbocavernosus, (C) superficial transverse perineus muscle, (D) superficial portion of external sphincter ani; (E) fibers of the profundus external sphincter; (F) encircling fibers of the subcutaneous external sphincter ani.



The levator ani muscle in the female from below

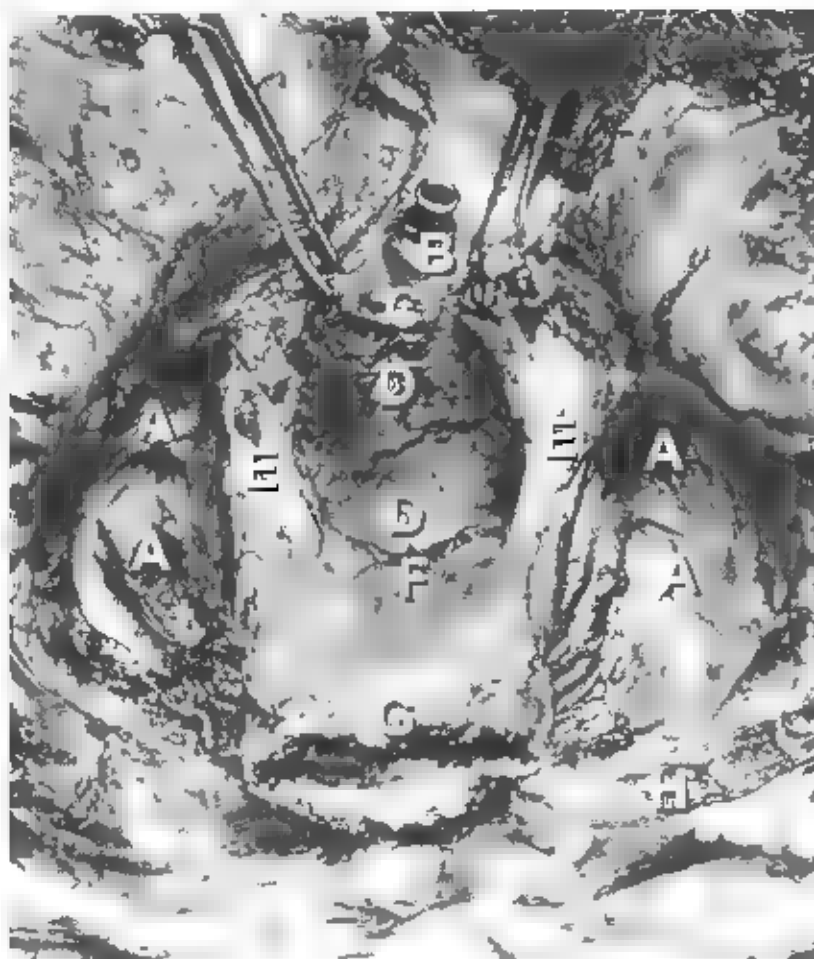
Note that the levator legs to the vagina are not shown here but lie deep to the superficial perineal musculature

- (A) bulbocavernosus
- (B) sup. transverse perineus muscle
- (C) pubococcygeus
- (D) puborectalis muscle
- (E) iliococcygeus
- (F) ischiococcygeus

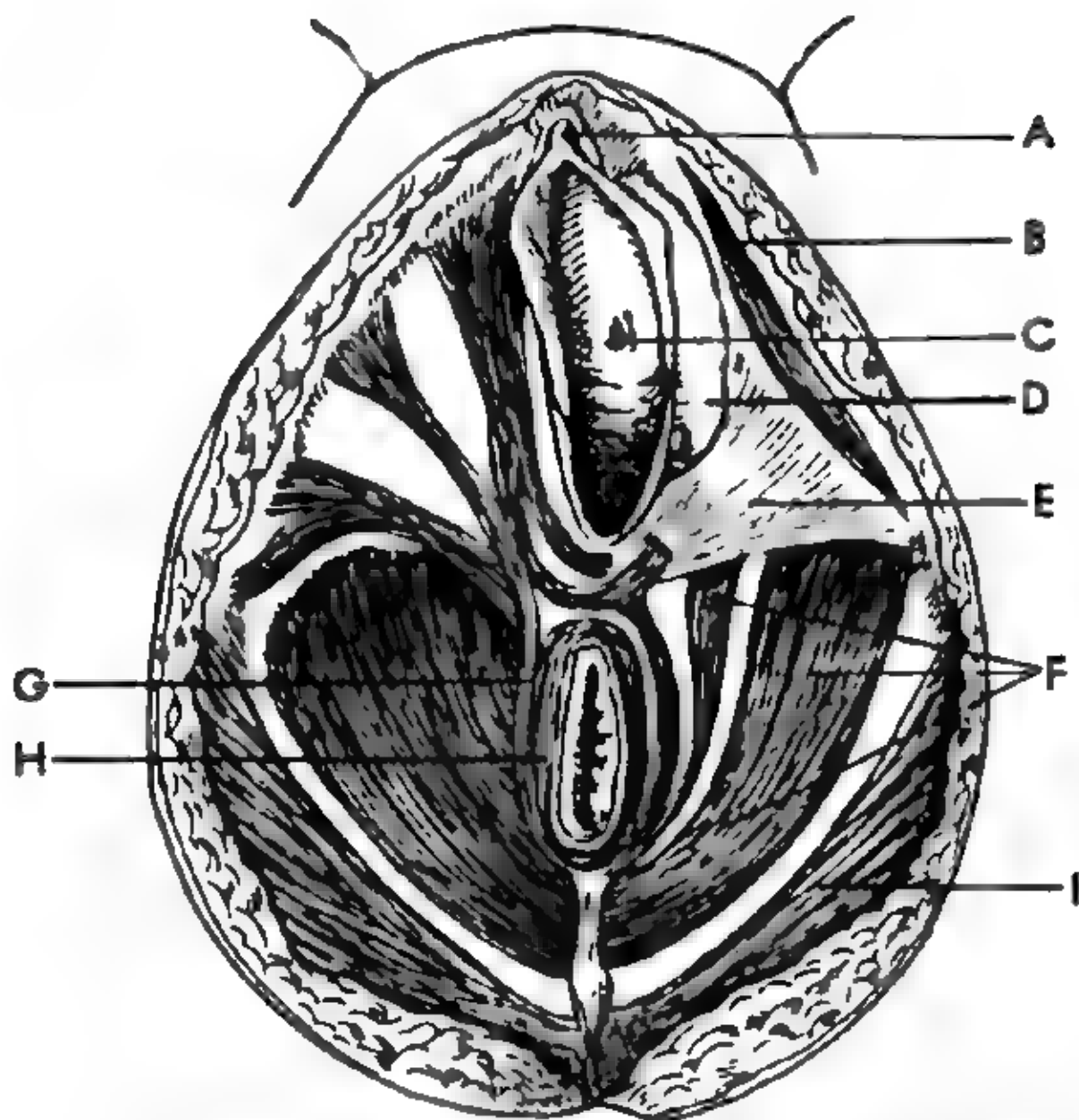
The sling-like arrangement of the pubococcygeal portions of the levator ani muscles is well shown in this dissection

Note the intimate relation to the anal sphincter. The hub of the needle lies in the urethra and the clamps retract the posterior vaginal wall

- (A) ischioanal fossa
- (B) urethra
- (C) posterior vaginal wall
- (D) rectovaginal space (septum)
- (E) levator ani legs
- (F) anterior rectal wall
- (G) external anal sphincter
- (H) gluteus





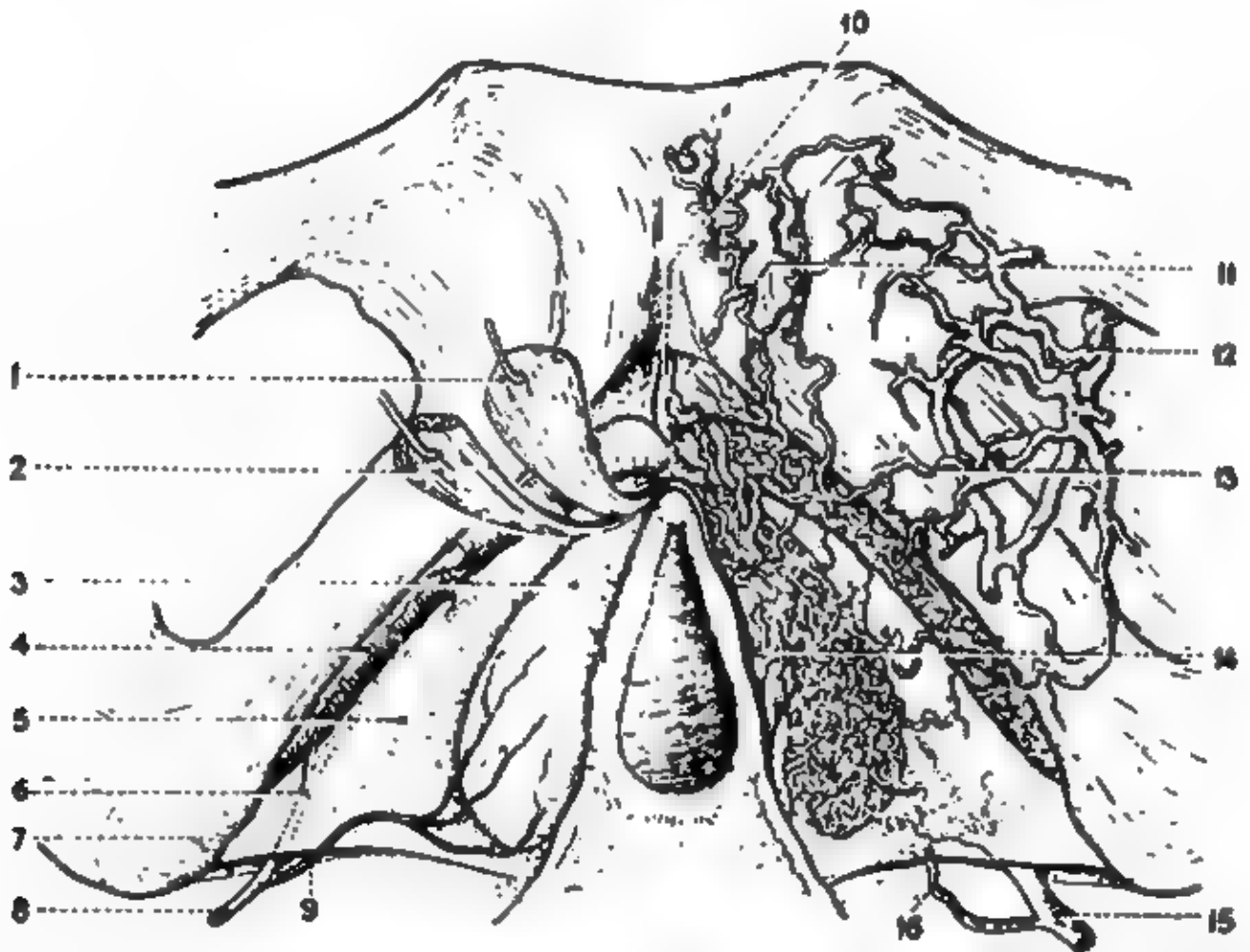


TRIANGULAR LIGAMENT IN THE FEMALE. DRAWN FROM DISSECTION

Note the wing of the triangular ligament on the left side. The superficial perineal muscles have been removed, exposing the bulb. Note also the arrangement of the anterior extensions of the superficial portion of the external anal sphincter muscle. Its diverging legs reach the pubic arch and many of its fibers fuse with the bulbo-cavernosus muscle.

(A) Clitoris, (B) ischio-cavernosus muscle, (C) urethra, (D) bulb, (E) *triangular ligament*; (F) levator ani, (G) superficial external sphincter muscle, (H) subcutaneous sphincter muscle; (I) gluteus maximus muscle.

The bulbs of the vagina and corpora cavernosa of the clitoris.  
Diagram shows relationship of bulbs and cavernosa to the ischium and the vagina



**Figure 24.** Bulbs of the vagina and the corpora cavernosa of the clitoris, seen from the front. On the patient's right is the artery; on the left are the veins. 1. Bulbocavernosus muscle. 2. Ischiocavernosus muscle. 3. Vaginal bulb in its albugineal sheath. 4. Peripheral portion, corpus cavernosum. 5. Middle perineal fascia. 6. Deep perineal artery. 7. Alcock's canal. 8. Internal pudendal artery. 9. Bulbar artery. 10. Dorsal vein of the clitoris. 11. Connections to the subcutaneous abdominal veins. 12. Obturator vein. 13. Connecting veins. 14. Veins of the labia minora. 15. Internal pudendal vein. 16. Bulbar vein.

## Sexual Response and Orgasm

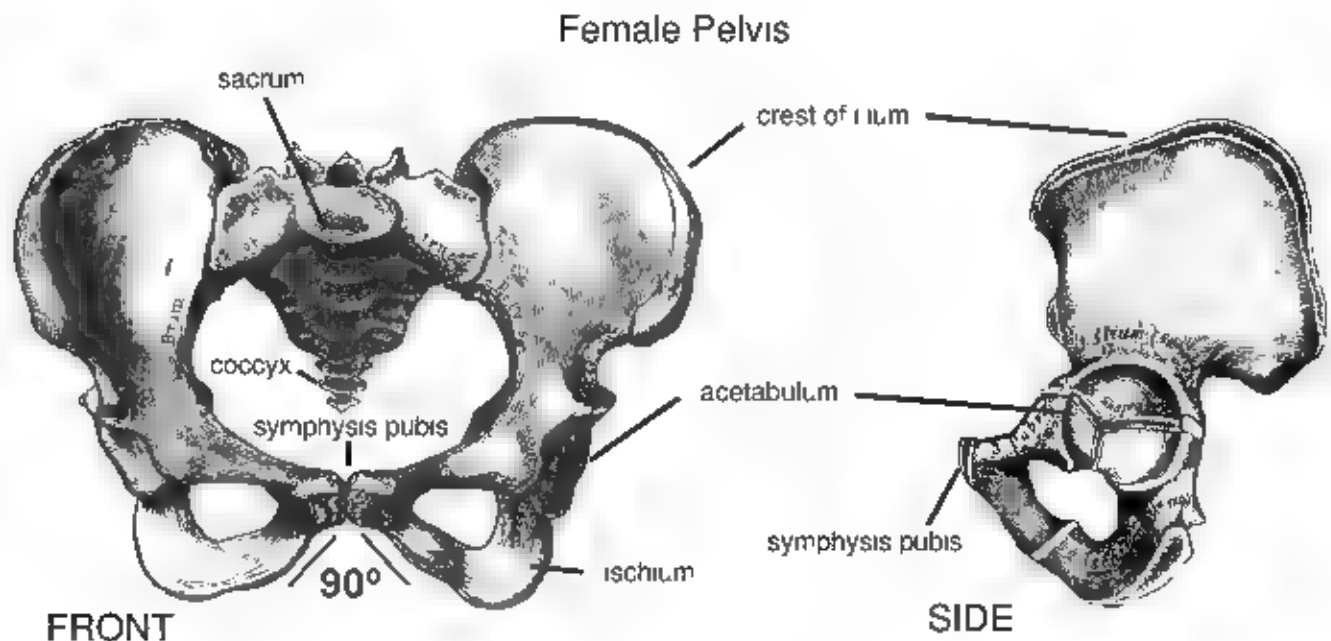
The first stage of sexual response is the excitement stage. During this stage the vagina expands in length as the uterus moves away from the bladder. Lubrication of the vagina begins within 30 seconds of stimulation as small drops of fluid begin to appear in the vagina by a process similar to sweating. Total lubrication during intercourse may amount to several milliliters. The labia majora engorge with blood and spread outward as do the labia minora and the clitoris. The labia minora expand about three times their normal size. The clitoris is pulled down by the action of the pelvic muscles and also expands in size by two or three times, most of this increase is in the diameter of the glans clitoris. Continued stimulation leads to continued physical response. The breasts increase in size through engorgement with blood and the nipples become erect.

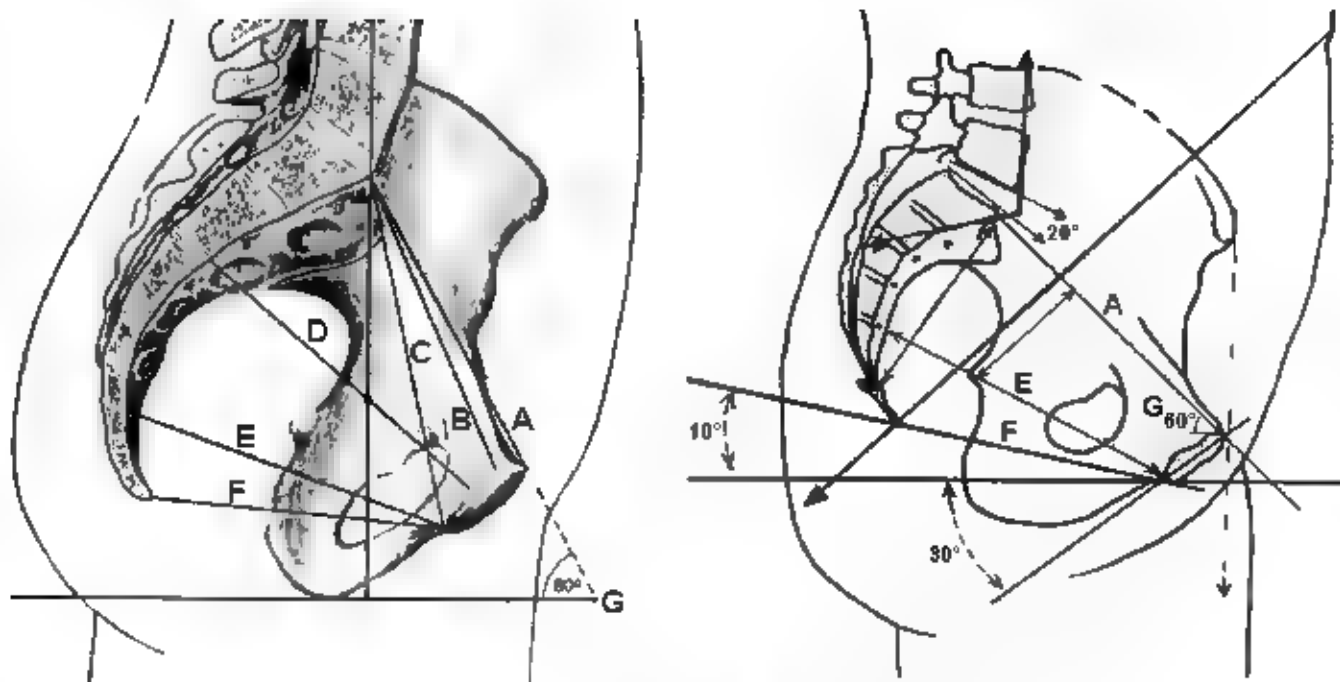
The next stage is the plateau stage which immediately precedes orgasm or in the case of non-orgasm, the resolution stage. The vagina reaches its maximum length, the vaginal muscles contracting to hold the penis tighter. An orgasmic platform (muscles and vasocongestion of the vaginal lining form a cuff around the erect penis) forms. Signs of approaching orgasm include rapid involuntary pelvic thrusting, hyperventilation, flexing of the fingers and toes, and increased heart and respiration rates (heart rate goes from a normal 72 per minute to as high as 180 per minute, respiration rate increases from 16 to over 40 breaths per minute). The areole of the breasts expands in size.

The muscles near the mouth of the vagina and the lower third of the vagina contract at a rate of 3 or 4 contractions per minute. On top of these slow contractions, the levator ani muscle contracts at the rate of 15 to 20 per minute. Overall vaginal pressure in the outer third of the vagina increases due to the swelling of the smooth lining of the walls. Combining the effects of the various muscles we find that in the lower third of the vagina contractions come in groups of two or three once every twenty seconds or so. These increase in frequency and intensity until orgasm. Maximum pressure occurs approximately 3cm inside the vagina.

A number of involuntary contractions of the orgasmic platform signal orgasm. There are 10 to 15 contractions of the orgasmic platform and the superficial musculature (the ischio-cavernosus, bulbocavernosus and transverse perineal muscles) each contraction lasting about 0.8 second and extending over a total period of 20 to 40 seconds. The contractions are of considerable strength and may be seen as a rapid elevation and depression of the clitoris as well as a bowing of the labia minora. The pubococcygeus muscle also contracts during orgasm. Pressure exerted by the vagina is equivalent to a pressure of between twenty and thirty millimeters of mercury (a voluntary contraction). In metric this is 2.6kPa to 4.0kPa.

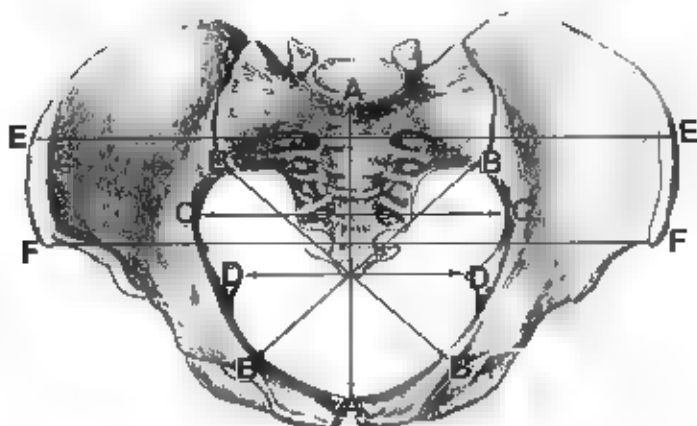
See the following pages for information on muscle contractions during stimulation and orgasm. Study the muscle diagrams to see how the various muscles support and apply pressure to the vagina, anus and clitoris.





### Pelvic Measurements and Inclination (diagrams above)

(A) conjugate diameter at pelvic inlet (B) true conjugate 11.5cm (normal) (C) diagonal conjugate 13cm (normal) (D) pelvic cavity at its widest (E) pelvic cavity at its narrowest (F) pelvic outlet (G) pelvic inclination (60°)



### Diameters of the Female Pelvis (diagram left)

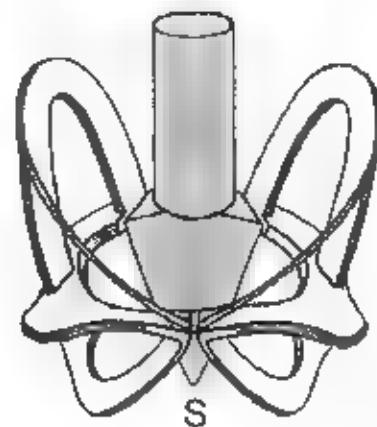
(A) conjugate (B) oblique (C) transverse (D) pelvic cavity between ischial spines (E) intercristal distance 29cm (normal) (F) interspinous distance 26cm (normal)

### Diagrammatic representations of the Pelvis (diagrams right)

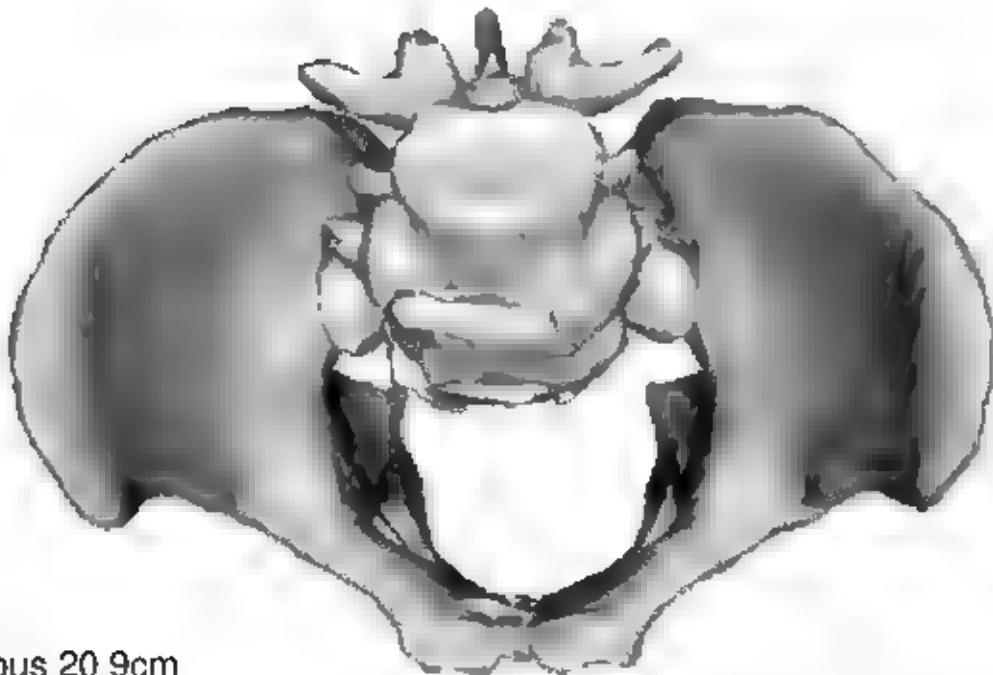
(W) weight bearing framework of the pelvis and (S) the structural framework of the pelvis



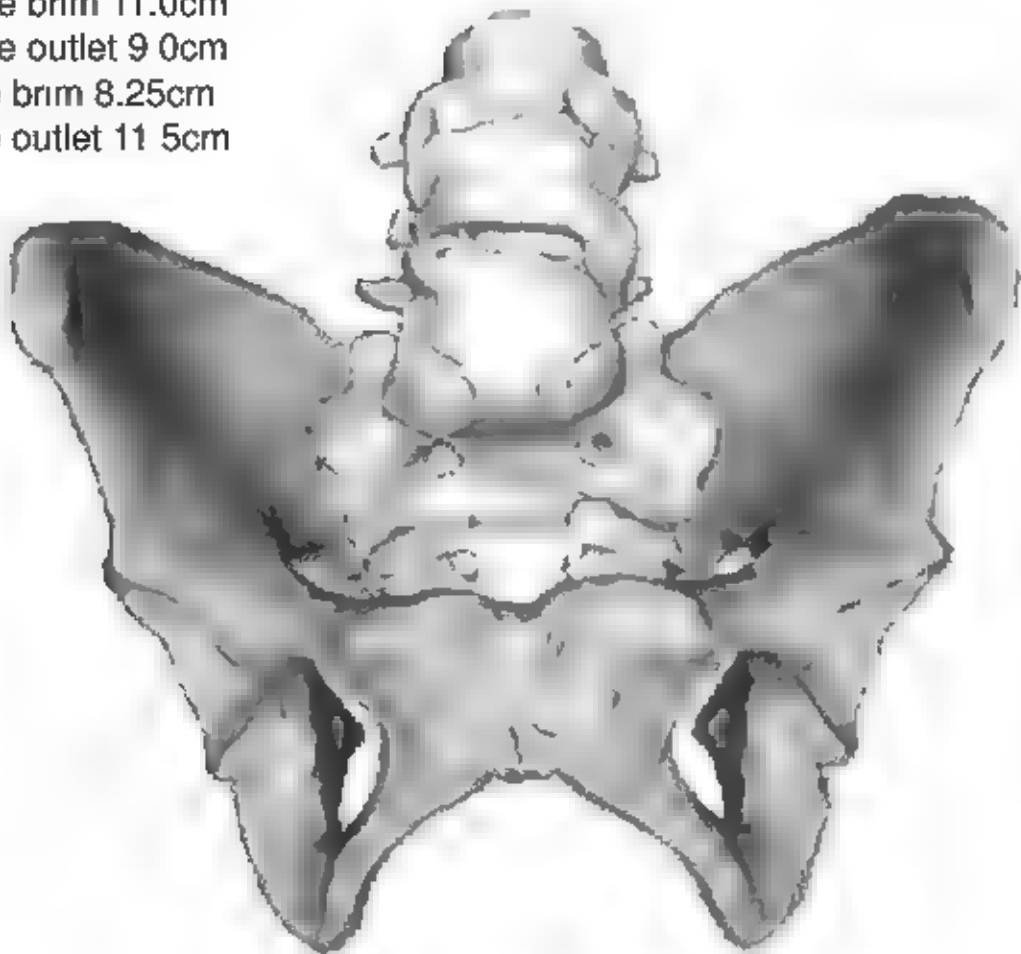
(A) ring of pelvic girdle (B) Cranial span (C) Caudal span (ischium and pubis)



Small Round Pelvis  
27 year old female

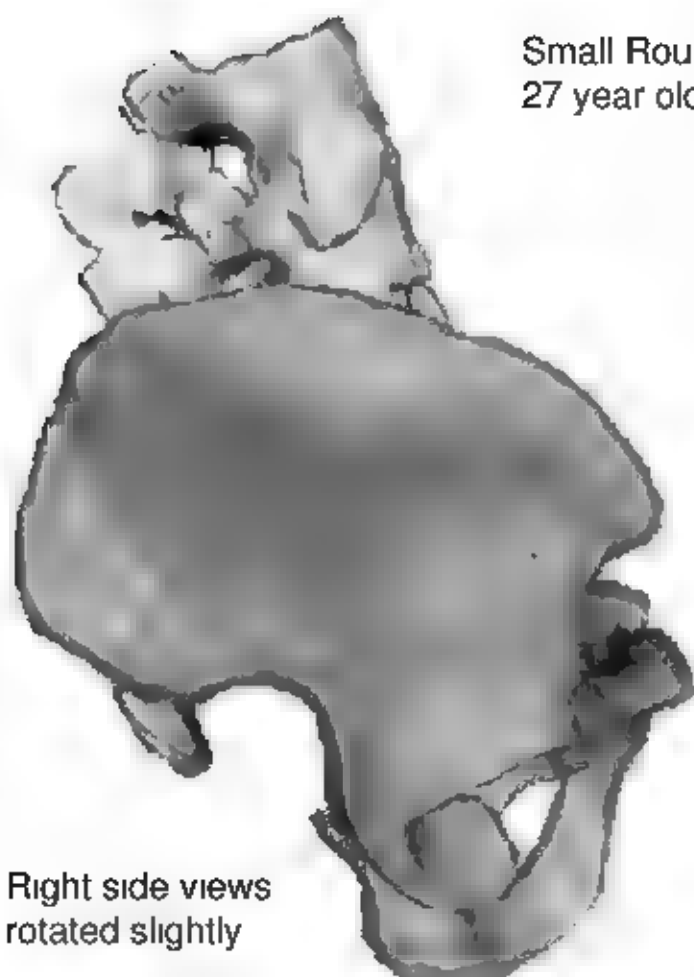


Interspinous 20.9cm  
Intercristal 23.5cm  
Transverse brim 11.0cm  
Transverse outlet 9.0cm  
Conjugate brim 8.25cm  
Conjugate outlet 11.5cm

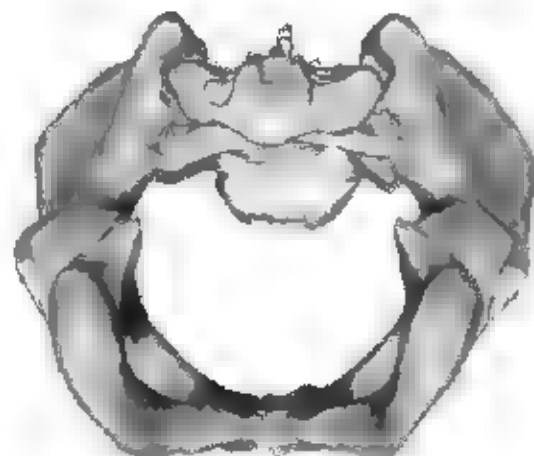
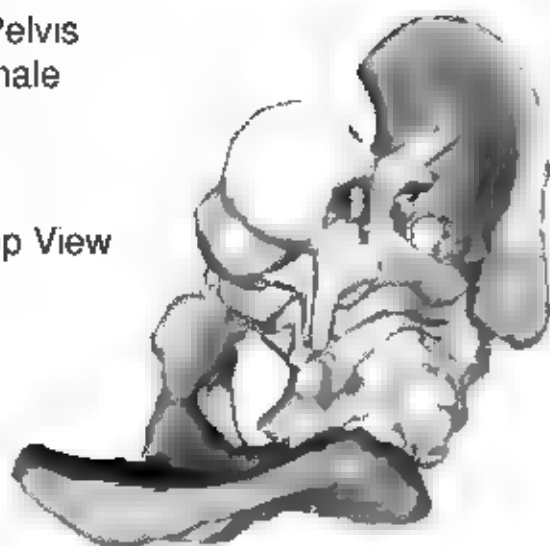
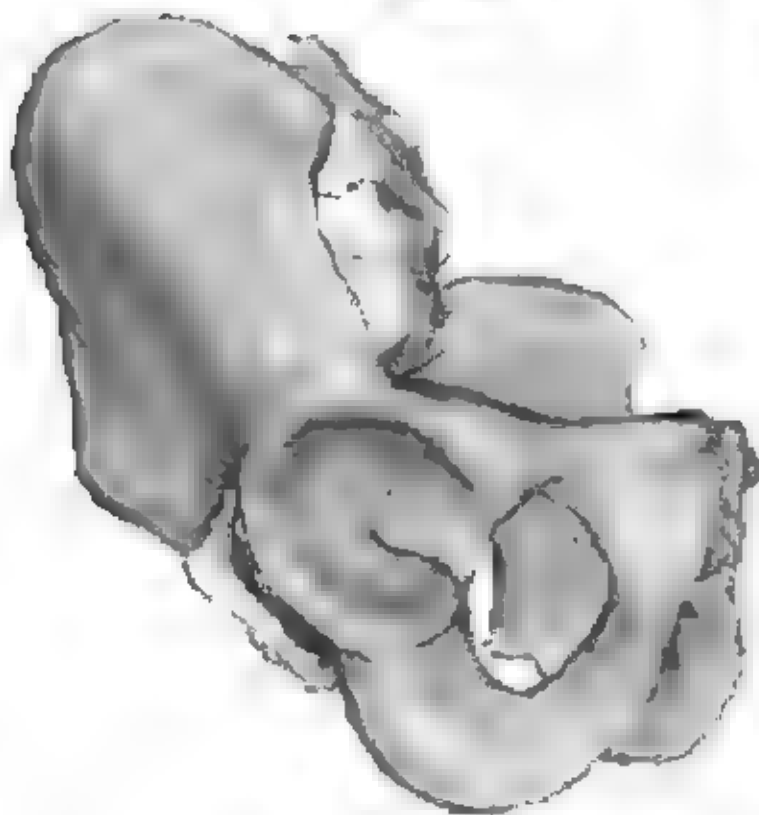


Small Round Pelvis  
27 year old female

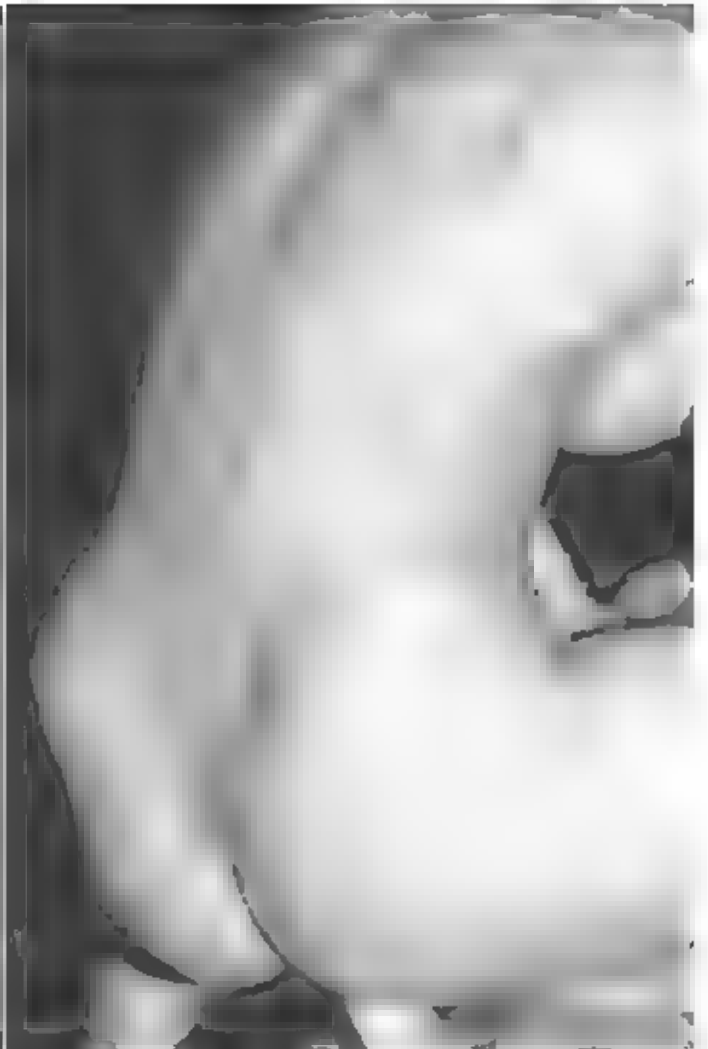
Top View



Right side views  
rotated slightly



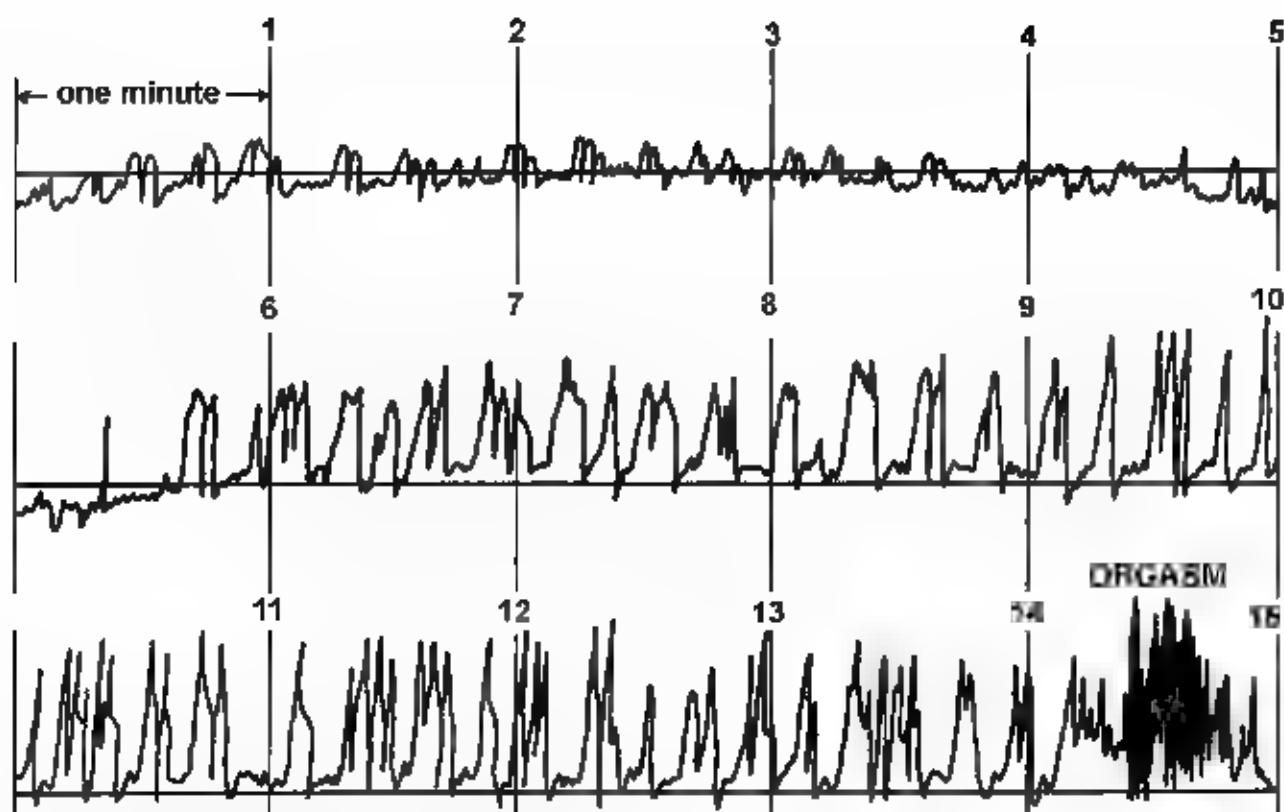
View from Below



Pelvic Landmarks



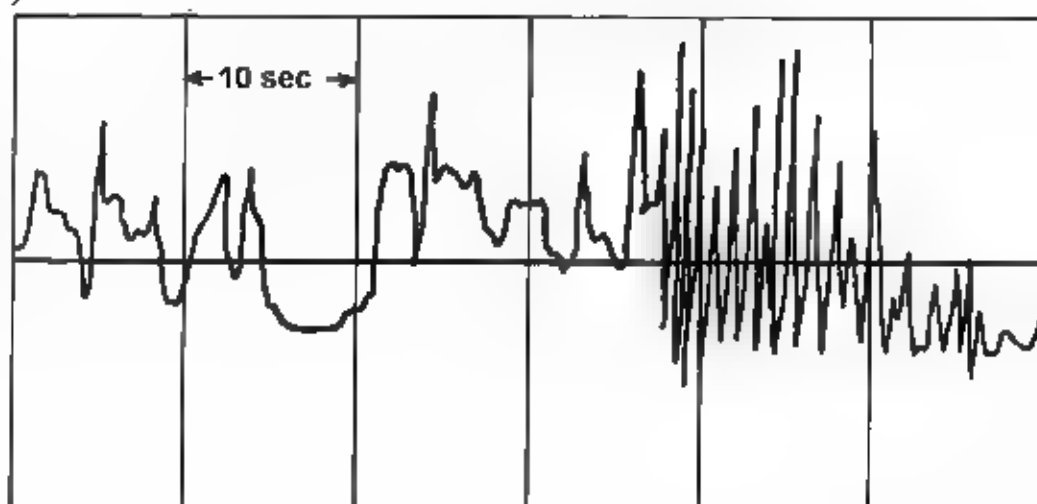


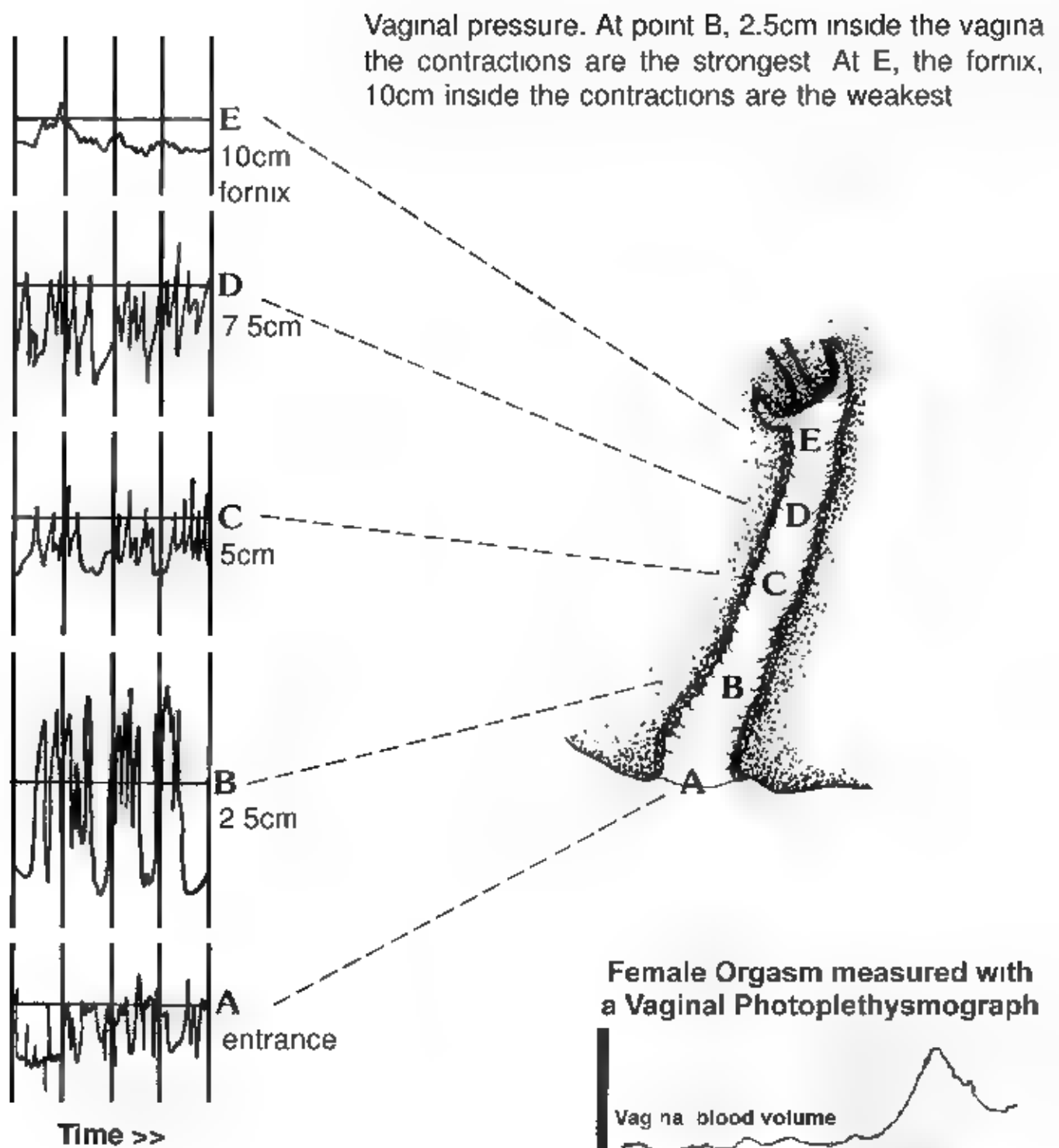


Vaginal pressure during stimulation and orgasm. This figure shows the recording from a pressure sensor located approximately 3cm inside the vaginal opening. Each division is one minute, 15 minutes in total. Maximum pressure about 4.0 kPa.

Detail of orgasm

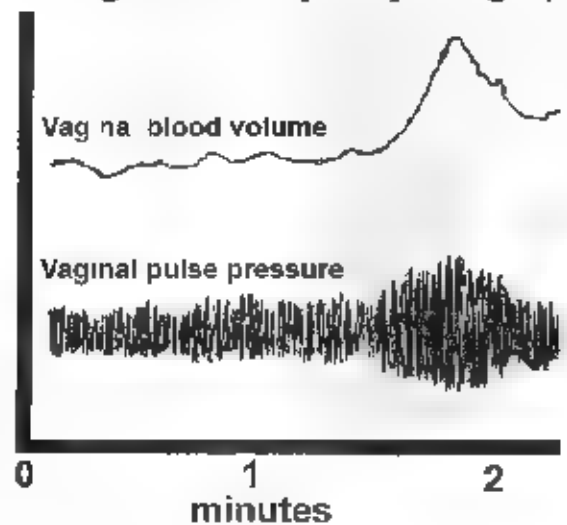
The final minute of the sexual response cycle. The closely spaced spiked waves are the orgasmic contractions.

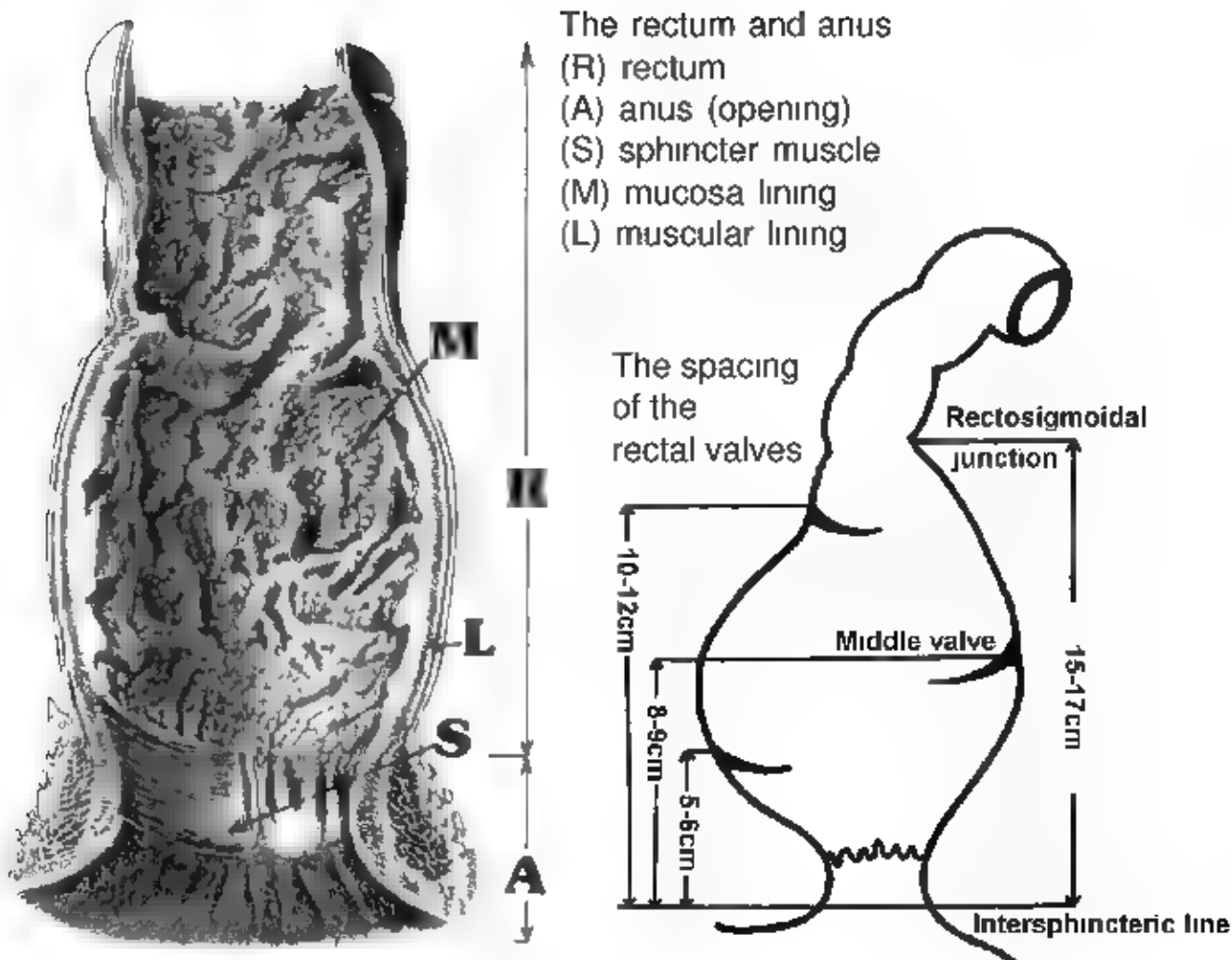




Blood volume in the vaginal walls during orgasm. Blood volume tightens the vagina. Test subject masturbated to orgasm and indicated beginning and end of her orgasm.

**Female Orgasm measured with a Vaginal Photoplethysmograph**





The superficial layer of the anal region (superficial perineal space) is covered by thin skin and contains the cutaneous muscles together with finely lobed adipose tissue. The cutaneous muscles are partly nonstriated and partly striated. The nonstriated muscle bundles are derived from the external muscle coat of the rectum; fibers from which continue as tendinous strands into the subcutaneous fat. They provide an anchorage for the rectum. Because the external longitudinal muscle is absent, the circular muscle predominates and is further reinforced and thickened to form the massive sphincter ani internus muscle.

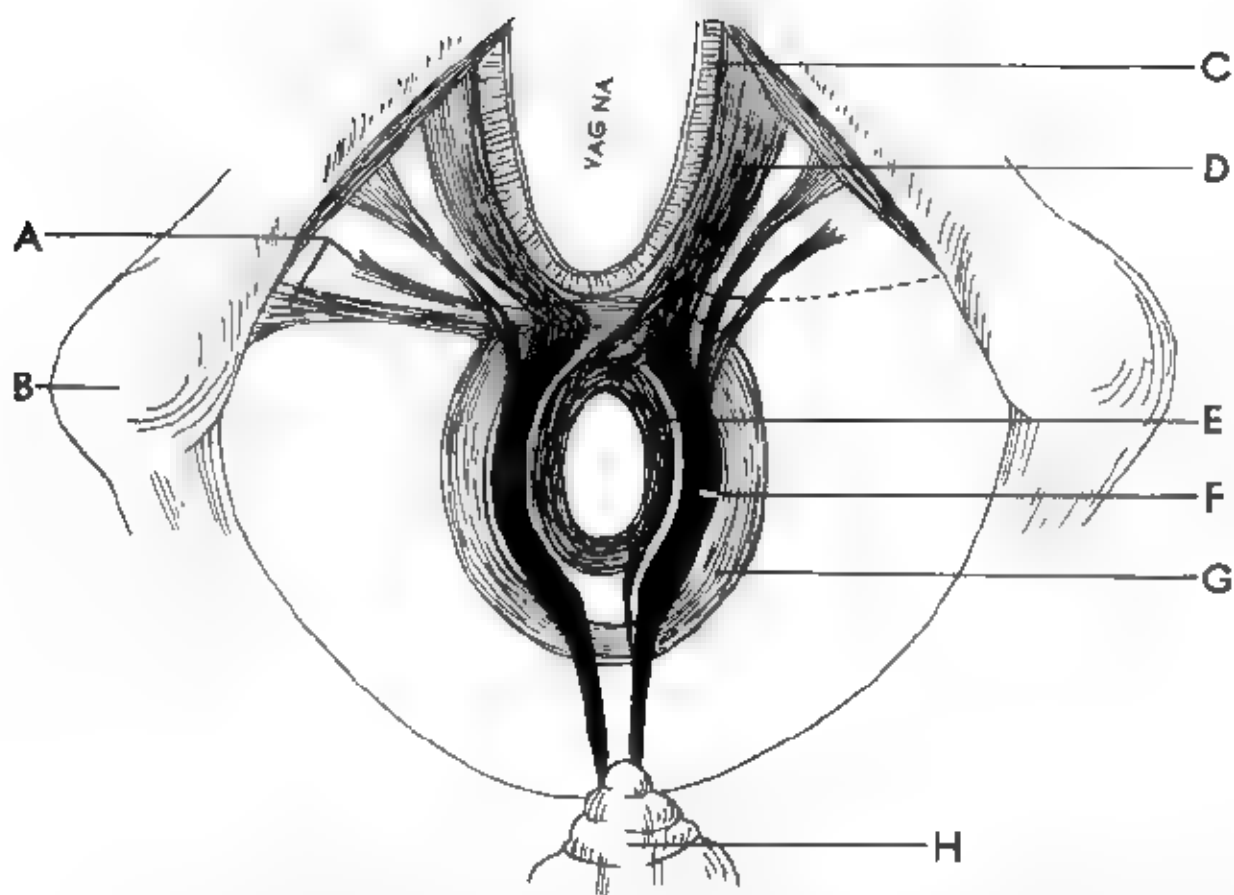
The superficial subcutaneous perineal space also contains the superficial vessels and nerves of the perineal region. When dissecting the anal region, special attention must be paid to the cutaneous muscles, which are embedded in the subcutis. The anal region is a subdivision of the perineal region. Unlike the urogenital region, it is divided into two layers: above the superficial (subcutaneous) perineal space there is the supralelevator space. Furthermore, the superficial perineal space can be seen to consist of two tiers separated by a boundary lamella. This boundary lamella divides the loose subcutaneous fat from the coarsely lobed fat of the ischiorectal fossa, which lies below the levator ani (supralelevator space).

The cutaneous muscles of the perineal region have a common basis in the sphincter cloacae muscle of lower vertebrates. The superficial layer of this sphincter muscle gives rise to the superficial part of the sphincter ani externus muscle, the bulbospongiosus muscles (bulbocavernosus muscles) and the ischiocavernosus muscles. The deep layer of the cloacal sphincter gives origin to the deep part of the sphincter ani externus muscle and to the muscles of the urogenital triangle.

The superficial subcutaneous layer of the anal region (superficial perineal space) contains finely lobulated fat in which lie radiating strands from the sphincter ani externus muscle, connected with the anal canal.

The sphincter ani externus muscle is situated at the lower end of the rectum, encircling the anal canal. It forms a ring 2-3 cm in height and is subdivided into superficial and deep portions. The superficial portion crosses in front of and behind the anus, while the more deeply situated bundles run to the coccyx and anococcygeal ligament posteriorly. Anteriorly, some bundles radiate into the bulbospongiosus muscle (bulbocavernosus muscle) so that viewed as a whole it forms a figure-of-eight pattern. The sphincter ani externus muscle is supplied by the pudenda nerve, which runs in company with and anterior to the inferior rectal vessels.

**The Superficial layer.** The skin is thin, smooth and soft. It may be pigmented and it contains numerous glands in the vicinity of the anus. 1-1.5 cm from the anal orifice there is a circle up to 2 cm in breadth, containing numerous convoluted glands known as the circumana glands.



EXTERNAL ANAL SPHINCTER IN THE FEMALE (SCHEMATIC)

Note that the *subcutaneous* portion of the external sphincter is usually annular but may partially decussate anteriorly or, less commonly, posteriorly. The *superficialis* arises, as in the male, from the sides of the coccyx, and surrounds the mid-portion of the anal canal in a spindle-shaped manner. Many of its fibers become continuous with the bulbocavernosus of the same side and additional small bundles of uncrossed fibers extending to the pubic rami are commonly found. Some of its fibers insert into the perineal body. The *profundus* portion, in close relation to the puborectalis posteriorly, surrounds the anal canal in an annular fashion. Its fibers may insert into the central perineal tendon. In many cases, however, the bulk of its fibers cross and, becoming continuous with the superficial transverse perineal muscle, insert into the pubic ramus of the opposite side. The free borders of the levator ani muscles forming the genital hiatus are in close relation to these fibers of the profundus external sphincter.

(A) Crossed fibers of profundus external sphincter ani; (B) ischial tuberosity; (C) vaginal wall; (D) bulbocavernosus; (E) subcutaneous external sphincter ani; (F) superficialis external sphincter ani; (G) profundus external sphincter ani; (H) coccyx.



# Contemporary views on female pelvic anatomy

MATTHEW D. BARBER, MD, MHS

**T**he durable surgical repair of pelvic organ prolapse and its related disorders remains a significant challenge. The pelvic reconstructive surgeon needs an intimate knowledge of relevant surgical landmarks as well as a fundamental understanding of the biomechanics of pelvic organ support in order to successfully restore normal visceral anatomy and function. Rather than presenting a detailed description of female pelvic anatomy, this review provides a discussion of the contemporary understanding of female pelvic organ support, with emphasis on the functional and surgical anatomy of the vagina, urethra, and pelvic floor, as well as a discussion of obturator anatomy, as several new innovative procedures now use the transobturator approach.

## ■ ORIENTATION OF THE BONY PELVIS

The pelvic bones are the ilium, ischium, pubic rami, sacrum, and coccyx. The bony pelvis is the rigid foundation to which all of the pelvic structures are ultimately anchored. Although pelvic surgeons often visualize the orientation of the pelvis in the supine or lithotomy position, it is important to understand and discuss the bony pelvis from the perspective of a standing woman. In the standing woman, the pelvis is oriented such that the anterior superior iliac spine and the front edge of the pubic symphysis are in the same vertical plane, perpendicular to the floor (**Figure 1**). As a consequence, the pelvic inlet is tilted anteriorly and the ischopubic rami and genital hiatus are parallel to the ground. In the upright posi-

tion, the bony arches of the pelvic inlet are oriented in an almost vertical plane. This directs the pressure of the intra-abdominal and pelvic contents toward the bones of the pelvis instead of the muscles and endopelvic fascia attachments of the pelvic floor. Thus, in the standing position, the bony pelvis is oriented such that forces are dispersed to minimize the pressures on the pelvic viscera and musculature and will transmit the forces to the bones that are better suited to the long-term, cumulative stress of daily life. Where the pubic rami articulate in the midline, they are nearly horizontal. Much of the weight of the abdominal and pelvic viscera is supported by the bony articulation inferiorly.

## Varied shape, orientation associated with prolapse

Variations in the orientation and shape of the bony pelvis have been associated with the development of pelvic organ prolapse. Specifically, a loss of lumbar lordosis and a pelvic inlet that is less vertically oriented is more common in women who develop genital prolapse than in those who do not.<sup>1,2</sup> A less vertical orientation of the pelvic inlet is thought to result in an alteration of the intra-abdominal vector forces that are normally directed anteriorly to the pubic symphysis such that a greater proportion is directed toward the pelvic viscera and their connective tissue and muscular supports. Similarly, women with a wider transverse pelvic inlet appear to be at increased risk of developing pelvic organ prolapse.<sup>3,4</sup> Some have theorized that a wider pelvic inlet provides a larger hiatus for abdominal pressure transmission to the pelvic floor, which leads to loss of pelvic visceral support over time.<sup>3</sup> Variations in the shape and orientation of the bony pelvis are also an important factor that influences maternal soft-tissue damage and nerve injury during parturition.

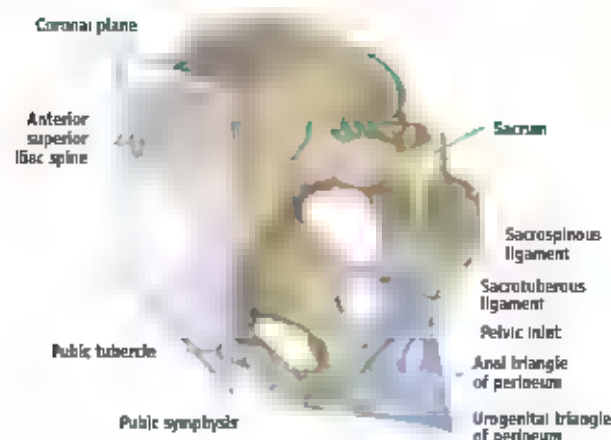
## ■ PELVIC FLOOR MUSCULATURE

The skeletal muscles of the pelvic floor include the levator ani muscles, the coccygeus, the external anal sphincter, the striated urethral sphincter, and the deep and superficial perineal muscles. The muscles of

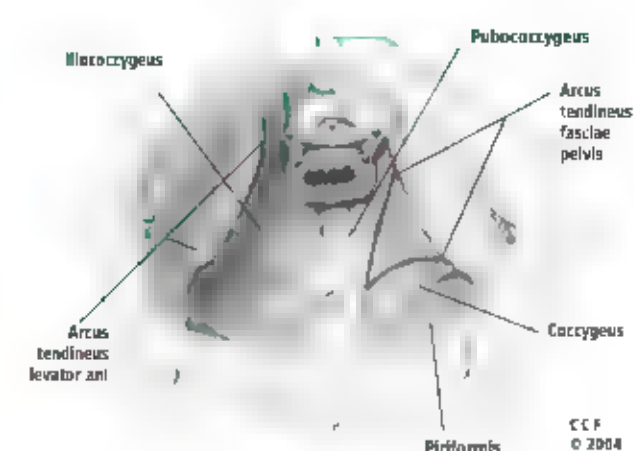
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**Disclosure:** Dr. Barber reported that he has no financial interests or affiliations that pose a potential conflict of interest with this article.



**FIGURE 1.** Orientation of the bony pelvis in the standing position. In this position, the anterior superior iliac spine and the pubic tubercle are perpendicular to the floor, whereas the urogenital triangle of the perineum is horizontal. Reprinted from Drake RL et al, eds, *Gray's Anatomy for Students*, copyright 2005, with permission from Elsevier.



**FIGURE 2.** Illustration of the female pelvic floor showing relationships of the muscles of the pelvic floor and sidewalls and their attachments from an abdominal view. The arcus tendineus fasciae pelvis has been removed on the left, showing the origins of the levator ani muscles. On the right, the arcus tendineus fasciae pelvis remains intact, showing the attachment of the lateral vagina via the endopelvic fascia (cutaway).

the pelvic floor, particularly the levator ani muscles, have a critical role in supporting the pelvic visceral organs and play an integral role in urinary, defecatory, and sexual function. The levator ani muscle complex consists of the pubococcygeus (also called pubovesical), the puborectalis, and the iliococcygeus (**Figure 2**).<sup>5,6</sup> The pubococcygeus originates on the posterior inferior pubic ramus and inserts on the middle-visceral organs and the anococcygeal raphe. The puborectalis also originates on the pubic bone, but its fibers pass posteriorly and form a sling around the vagina, rectum, and perineal body, resulting in the anorectal angle and promoting closure of the urogenital hiatus. The iliococcygeus originates from the arcus tendineus levator ani (ATLA), a thickening of the fascial covering of the obturator internus that runs from the sacral spine to the posterior surface of the ipsilateral superior pubic ramus. It inserts in the midline onto the anococcygeal raphe. The space between the levator ani musculature through which the urethra, vagina, and rectum pass is called the urogenital hiatus. The fusion of levator ani where they meet in the midline creates the so-called levator plate.

#### Constant resting tone, quick contraction ability

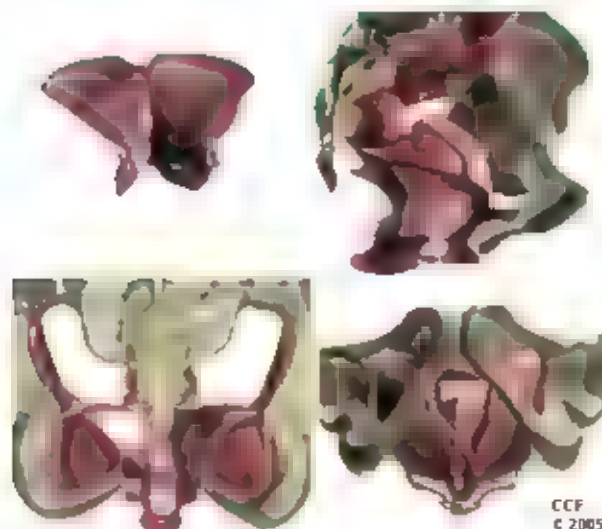
Pelvic floor muscles have a constant resting tone except during voiding, defecation, and the Valsalva maneuver. This activity serves to close the urethral and anal sphincters, narrow the urogenital hiatus, and provide a constant support for the pelvic viscera. The levator muscles and the skeletal components of the

urethral and anal sphincters all have the ability to contract quickly at the time of an acute stress, such as a cough or sneeze, in order to maintain continence and to relax during evacuation.

#### Three-dimensional structure for levator ani complex

Although most anatomy and surgical texts depict the levator ani muscles as a bowl or funnel-shaped, this reflects the uncontracted state of the muscles as might be seen in a cadaver dissection and not that of a normally functioning levator. In a woman with normal pelvic floor function, the levator ani muscle complex in its tonically contracted state has an intricate three-dimensional structure in which its anterior portion (pubococcygeus and puborectalis) is oriented vertically as a sling around the mid-urethra, vagina, and anorectum and its posterior portion (the iliococcygeus) has a horizontal upwardly biconvex shape resembling a butterfly wing (**Figure 3**).<sup>7</sup> Thus, the anterior portion of the levator ani complex serves to close the urogenital hiatus and pull the urethra, vagina, perineum, and anorectum toward the pubic bone, whereas the horizontally oriented posterior portion (levator plate) serves as a supportive diaphragm or “backstop” behind the pelvic viscera. Loss of normal levator ani tone, through denervation or direct muscle trauma, results in laxity of the urogenital hiatus, loss of the horizontal orientation of the levator plate, and a more bowl-like configuration. These changes can be bilateral or asymmetric.<sup>8</sup>





**FIGURE 3.** Digitally enhanced three-dimensional reconstructions of the female pelvic floor from a magnetic resonance image of the pelvis in a normal nulliparous 23-year-old woman. Upper left, anterior view of the levator ani muscle with normal resting tone. Upper right, sagittal view of the levator ani muscle, bony pelvis, vagina, and rectum. Lower left, posterior view of the levator ani muscle, obturator internus muscles, and bony pelvis. Lower right, lithotomy view.

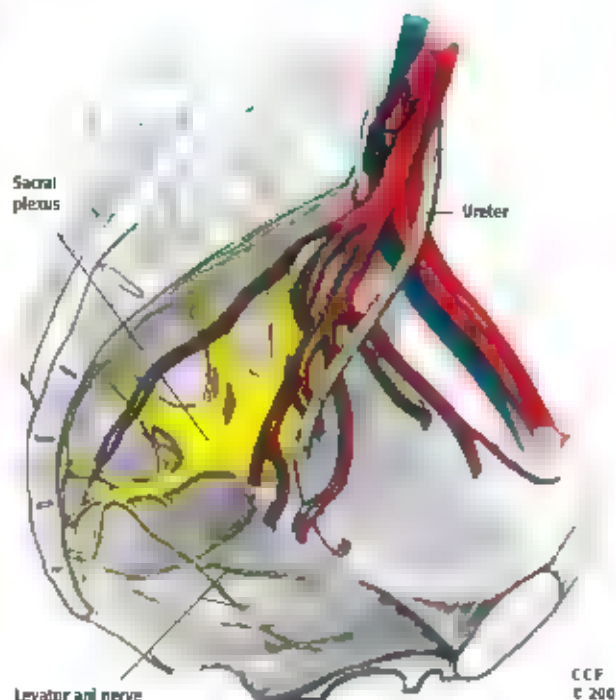
Such configurations are seen more often in women with pelvic organ prolapse than in those with normal pelvic organ support.<sup>7</sup>

### ■ INNERVATION OF THE PELVIC FLOOR MUSCLES

The pudendal nerve innervates the striated urethral and anal sphincters as well as the deep and superficial perineal muscles and provides sensory innervation to the external genitalia. This nerve follows a complex course that originates from S2–S4 (with S3 providing the largest contribution) and travels behind the sacrospinous ligament, just medial to the ischial spine, exiting the pelvis through the greater sciatic foramen. It then enters the ischiorectal fossa through the lesser sciatic foramen and travels through the pudendal canal (Alcock's canal) on the medial aspect of the obturator internus muscles before separating into several terminal branches that terminate within the muscles and skin of the perineum.

#### New insights into levator ani innervation

Many anatomic and surgical texts suggest that the levator ani muscles are dually innervated from (1) the pudendal nerve on the perineal surface and (2) direct branches of the sacral nerves on the pelvic surface. However, recent anatomic,<sup>9</sup> neurophysiologic,<sup>10,11</sup> and experimental evidence<sup>2,14</sup> indicates that these stan-



**FIGURE 4.** Sagittal view of the pelvis showing the arterial (red) and venous (blue) blood supply and nerves.

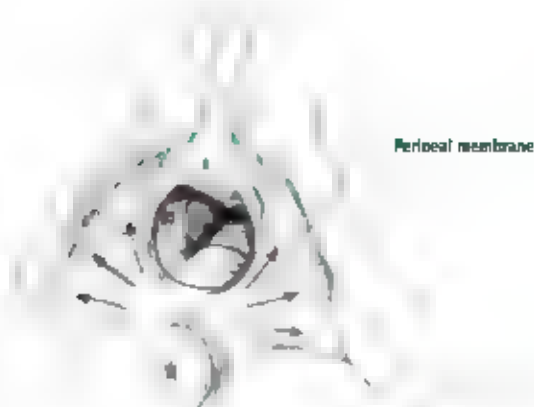
dard descriptions are inaccurate and that the levator ani muscles are innervated solely by a nerve traveling on the superior (intrapelvic) surface of the muscles without contribution of the pudendal nerve. This nerve, referred to as the levator ani nerve, originates from S3, S4, and/or S5 and innervates both the coccygeus and the levator ani muscle complex.<sup>9</sup> After exiting the sacral foramina, it travels 2 to 3 cm medial to the ischial spine and arcus tendineus levator ani across the coccygeus, iliococcygeus, pubococcygeus, and puborectalis (**Figure 4**). Occasionally, a separate nerve comes directly from S5 to innervate the puborectalis muscle independently.

Given its location, the levator ani nerve is susceptible to injury through parturition and pelvic surgery. Specifically, the fixation points used in the sacrospinous ligament fixation and the iliococcygeus vaginal vault suspensions are in close proximity to the course of the levator ani nerve. However, the impact that potential injury has on the long-term anatomic and functional success of these procedures is currently unknown.

### ■ PERINEUM

Although the area between the vagina and anus is described clinically as the “perineum,” anatomical-



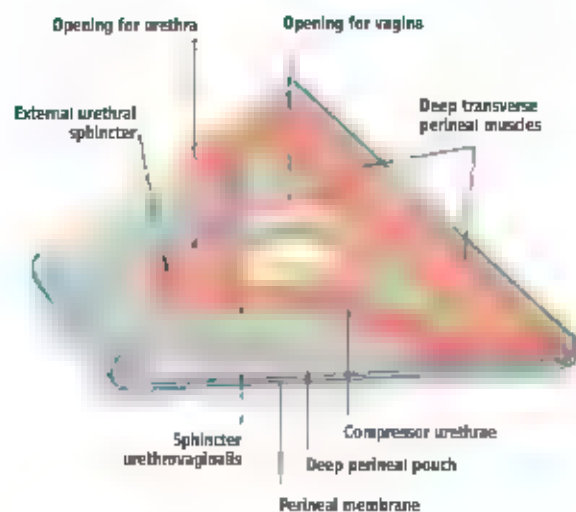


**FIGURE 5.** Perineal membrane with its attachments to the inferior pubic rami and direction of tension on fibers uniting through the perineal body (arrows). Reprinted from reference 16, copyright 1999 with permission from Elsevier.

y the perineum is the entirety of the pelvic outlet inferior to the pelvic floor. The area between the vagina and anus is more aptly termed the perineal body. The borders of the female perineum are the ischioptic rami, ischial tuberosities, sacrotuberous ligaments, and coccyx. A line connecting the ischial tuberosities divides the perineum into the urogenital triangle anteriorly and the anal triangle posteriorly. In the standing position, the urogenital triangle is oriented horizontally, whereas the anal triangle is tilted upward so that it faces more posteriorly (**Figure 1**).

The perineal membrane is a thick fibrous sheet that spans the urogenital triangle (**Figure 5**). It attaches laterally to the pubic arch and has a free posterior margin anchored in the midline by the perineal body. Although historically anatomists and clinicians have used the term urogenital diaphragm to describe this structure, this term has been abandoned because it erroneously implies a muscular diaphragm rather than a thick sheet of connective tissue.<sup>15,16</sup> The urethra and vagina penetrate through a hiatus in the perineal membrane (the urogenital hiatus) to exit at the vestibule. The perineal membrane, therefore, provides fixation of distal urethra, distal vagina, and perineal body to the pubic arches.

The urogenital triangle is divided into a superficial and deep perineal space by the perineal membrane. The superficial perineal space contains the superficial perineal muscles (ischiocavernosus, bulbospongiosus, superficial transverse perineal



**FIGURE 6.** Muscles of the deep perineal space. The perineal membrane is in the horizontal plane in the standing position. The muscles of the deep perineal space lie cephalad to the perineal membrane and below the levator ani muscles. Reprinted from Drake R, et al, eds, *Gray's Anatomy for Students*, copyright 2005, with permission from Elsevier.

muscles), the erectile tissue of the clitoris, the vestibular bulbs, and Bartholin's glands. The deep perineal space lies just deep to the perineal membrane and inferior to the levator ani muscles. Within this thin space lie the external urethral sphincter and the urethrovaginalis, compressor urethrae, and deep transverse perineal muscles (**Figure 6**).<sup>15,17</sup> The urethrovaginalis and compressor urethrae muscles provide accessory sphincter function to the urethra.<sup>17</sup> The urethrovaginalis muscle surrounds the distal urethra and vagina without passing between them and therefore acts as a sphincter to the vagina as well as to the distal urethra.<sup>15</sup> The deep transverse perineal muscle, along with its superficial counterpart, serves to stabilize the position of the perineal body and inferior border of the perineal membrane. There is some dispute as to whether the deep transverse perineal muscle is present in females, however.<sup>15</sup>

The perineal body marks the point of convergence of the bulbospongiosus muscle, superficial and deep transverse perineal, perineal membrane, external anal sphincter, posterior vaginal muscularis, and fibers from the puborectalis and pubococcygeus. The perineal body plays an important role in support of the distal vagina and in normal anorectal function. The vascular and nerve supply to the perineum, including the deep and superficial perineal spaces, is provided by the pudendal neurovascular bundle.

## ■ VAGINA

The vagina is a hollow, distensible, fibromuscular tube with rugal folds that extends from the vestibule to the uterine cervix. Its longitudinal shape resembles a trapezoid, as it is narrowest at the introitus and grows progressively wider as it approaches the vaginal apex and cervix. In the transverse dimension, the vagina is H-shaped at its distal end (toward the introitus) and flattened proximally. In the sagittal plane, the vagina has a distinct angulation so that its upper two thirds is directed toward the third and fourth sacral vertebrae and is almost horizontal in the standing position. In contrast, the lower third is nearly vertical as it passes through the perineal membrane to the vestibule. The angle between the upper and lower axes of the vagina is approximately 130°.<sup>18</sup>

### Three layers of vaginal wall

Histologically, the vaginal wall is composed of three layers: mucosa, muscularis, and adventitia.<sup>19,20</sup> The vaginal mucosa is the most superficial layer and consists of stratified squamous epithelium and a lamina propria. The vaginal muscularis is a well-developed fibromuscular layer consisting primarily of interdigitating smooth muscle bundles with smaller amounts of collagen, elastin, and vascular tissue.<sup>19,20</sup> The outermost adventitia is a variably discrete layer of collagen, elastin, and adipose tissue containing blood vessels, lymphatics, and nerves. The adventitia represents an extension of the visceral endopelvic fascia that surrounds the vagina and adjacent pelvic organs and allows for their independent expansion and contraction.

### No 'fascial' layer

Some have used the terms pubocervical fascia and rectovaginal fascia to describe the layer separating the vagina from the bladder and rectum, respectively. Although these terms are widely used, "fascia" is a misnomer in this context, as it does not accurately reflect the histology of the vagina. Numerous authors have performed histologic analysis of the vaginal wall and have failed to identify a distinct "fascial" layer.<sup>16,19,20</sup> Between the adjacent pelvic organs is primarily vaginal muscularis. The "fascia" often noted by pelvic surgeons during vaginal dissection refers, in fact, to layers that are developed as a result of separating the vaginal epithelium from the muscularis, or by splitting the vaginal muscularis layer.<sup>19</sup> The one area where there does appear to be dense connective tissue separating the vagina from an adjacent organ is the distal posterior vaginal wall. The connective tissue of the perineal body extends 2 to 4 cm cephalad

from the hymenal ring along the posterior vaginal wall between the smooth muscle layers of the vagina and the rectum.<sup>16</sup> This layer does not, however, extend the full length of the posterior vaginal wall.

## ■ SUPPORT OF THE VAGINA AND UTERUS

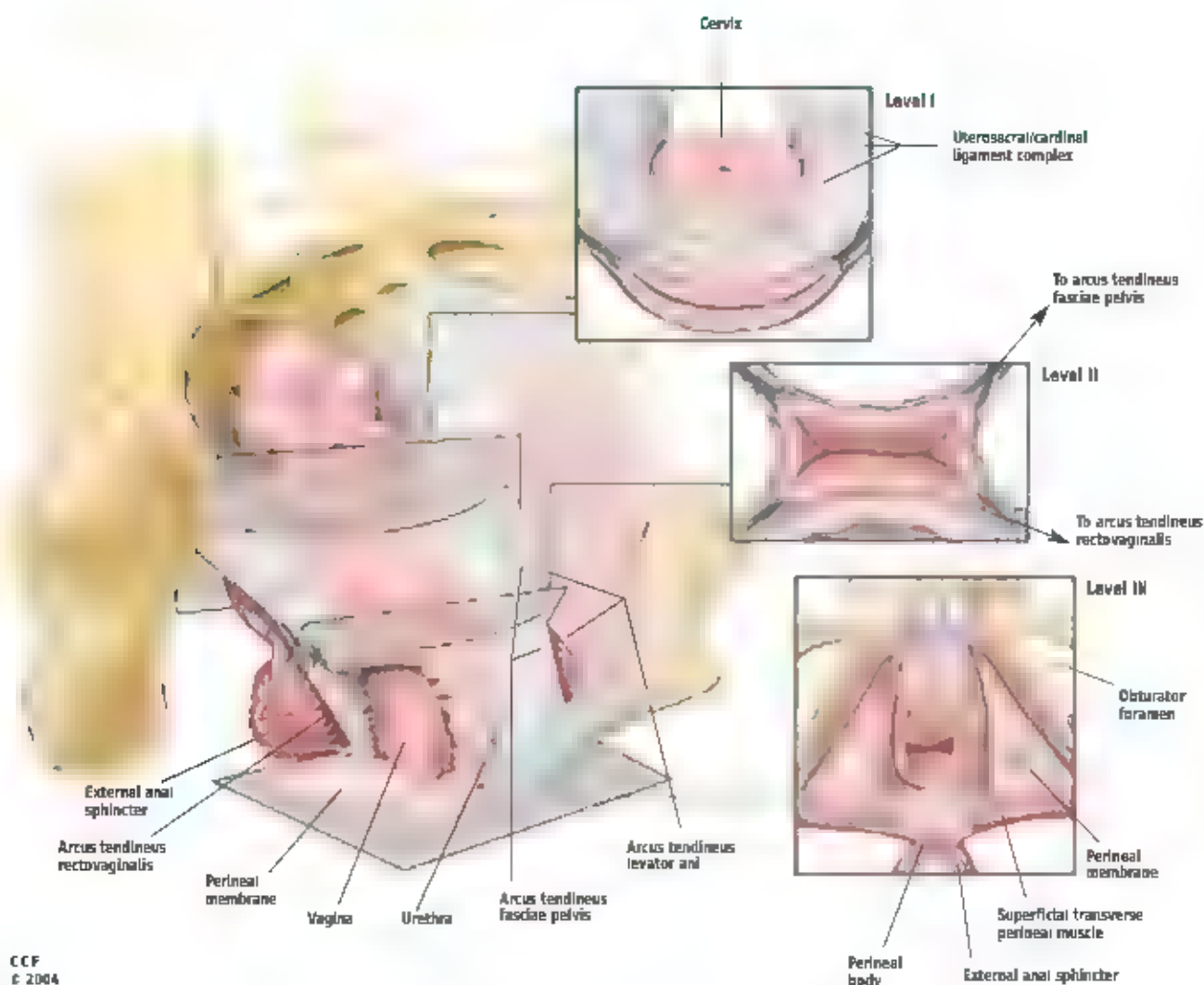
The normal axis of the pelvic organs in the standing woman places the upper two thirds of the vagina directly over the levator plate. The endopelvic fascia is the loose connective tissue network that envelops all of the organs of the pelvis and connects them loosely to the supportive musculature and bones of the pelvis. Histologically, it is composed of collagen, elastin, adipose tissue, nerves, vessels, lymph channels, and smooth muscle. This connective tissue network tethers the vagina and uterus in their normal anatomic location while allowing for the mobility of the viscera to permit storage of urine and stool, coitus, parturition, and defecation.

Several areas of the endopelvic fascia (and its associated peritoneum) have been named by anatomists. These are condensations of the endopelvic fascia and not true "ligaments": uterosacral ligament, cardinal ligament, broad ligament, mesovarium, mesosalpinx, and round ligament. The broad ligament, mesovarium, mesosalpinx, and round ligament do not play a role in support of the pelvic organs.

### Three integrated levels of support

DeLancey described the connective tissue supports of the vagina in three levels<sup>21</sup> (Figure 7). The uterosacral/cardinal ligament complex, which comprises level I support, is an intricate three-dimensional connective tissue structure that originates at the cervix and upper vagina and inserts at the pelvic sidewall and sacrum. Magnetic resonance images in healthy women reveal that the uterosacral ligament inserts in the area of the coccygeus and sacrospinous ligament in most women, with only 7% actually inserting into the sacrum.<sup>22</sup> The uterosacral/cardinal ligament complex suspends the uterus and upper vagina in its normal orientation. It serves to maintain vaginal length and keep the vaginal axis nearly horizontal in a standing woman so that it can be supported by the levator plate. Loss of level I support contributes to prolapse of the uterus and/or vaginal apex.

Contiguous with the uterosacral/cardinal ligament complex at the location of the ischioanal sphincter is level II support—the paravaginal attachments. The anterior vagina is suspended laterally to the arcus tendineus fasciae pelvis (ATFP), or white line, which is a thickened condensation of fascia overlying the iliopec-



**FIGURE 7.** Integrated levels of support. Illustration of the normal vaginal axis and the three levels of support of the vagina and uterus from the perspective of a standing woman. In level I, the endopelvic fascia suspends the upper vagina and cervix from the lateral pelvic walls. Fibers of level I extend both vertically and posteriorly toward the sacrum. In level II, the vagina is attached to the arcus tendineus fasciae pelvis and superior fascia of the levator ani muscles. In level III, the distal vagina is supported by the perineal membrane and muscles. The insets show transverse sections made through the vagina perpendicular to the normal vaginal axis at each level.

cygeus. The ATFP originates on the sacral spine and inserts on the inferior aspect of the pubic symphysis. The anterior level II supports suspend the mid-portion of the anterior vaginal wall, creating the anterior lateral vaginal sulci. Detachment of these lateral supports can lead to paravaginal defects and prolapse of the anterior vaginal wall.

In addition to the anterior paravaginal supports, there are posterior lateral supports at level II as well. The posterior vaginal wall is attached laterally to the pelvic sidewall in a slightly more complex arrangement than the anterior vaginal wall. The distal half of the posterior vaginal wall fuses with the aponeurosis of the levator ani muscle from the perineal body along a line referred to as the arcus tendineus rectovagi-

nalis. It converges with the ATFP at a point approximately midway between the pubic symphysis and the sacral spine.<sup>23</sup> Along the proximal half of the vagina, the anterior and posterior vaginal walls are both supported laterally to the ATFP. Thus, in the proximal vagina, the lateral supports for the anterior and posterior vaginal wall are identical. This arrangement accounts for the H-shape or box-like configuration of the distal vagina when viewed in cross-section and the flattened-tube configuration seen in the upper vagina (Figure 7).

Level III support is provided by the perineal membrane, the muscles of the deep perineal space, and the perineal body. These structures support and maintain the normal anatomical position of the urethra and



the distal third of the vagina, which is perpendicular to the floor in a standing woman. At level III, the vagina fuses with the urethra anteriorly and with the perineal body posteriorly. Disruption of level III support anteriorly can result in urethral hypermobility and stress incontinence, and disruption posteriorly may result in distal rectoceles and/or perineal descent.

### ■ INTERACTIONS BETWEEN MUSCULAR AND CONNECTIVE TISSUE SUPPORTS

Normal pelvic organ support and function depends on dynamic interaction between the pelvic floor musculature and the endopelvic fascia. In a standing woman, the endopelvic fascia suspends the upper vagina, the bladder, and the rectum over the levator plate while the pelvic floor muscles close the urogenital hiatus and provide a stable platform on which the pelvic viscera rests. Intra-abdominal and gravitational forces are applied perpendicular to the vagina and pelvic floor while the pelvic floor musculature counters those forces with its constant tone by closing. With proper tone of the pelvic floor muscles, stress on the connective tissue attachments is minimized. Furthermore, in times of acute stress, such as a cough or a sneeze, there is a reflex contraction of the pelvic floor musculature, countering and further stabilizing the viscera. The genital hiatus also responds by narrowing to maintain level III support.

With pelvic floor weakness, such as neuropathic injury or mechanical muscular damage, there is loss of the horizontal orientation of the levator plate, the urogenital hiatus opens, and the pelvic floor assumes a more bowl-like configuration. The endopelvic fascia then becomes the primary mechanism of support. Over time, this stress can overcome the endopelvic fascial attachments and result in loss of the normal anatomic position through breaks, stretching, or attenuation of these connective tissue supports. This can result in changes in the vector forces applied to the viscera and may lead to pelvic organ prolapse and/or dysfunction.

### ■ URETHRAL CONTINENCE MECHANISM

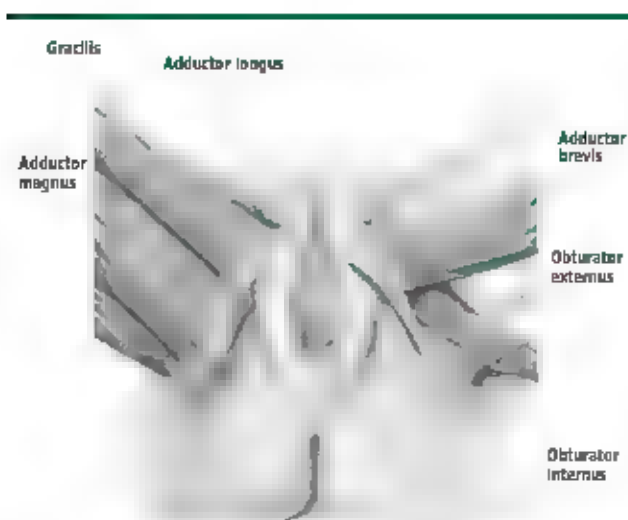
The urethra is about 3.5 to 4 cm long and averages 6 mm in diameter. Its lumen is slightly curved as it passes from the retropubic space, perforates the perineal membrane, and ends with its external orifice in the vestibule directly above the vagina, opening. Throughout most of its length the urethra is fused to the anterior vaginal wall.

Histologically, the urethra has four distinct layers: mucosa, submucosa, internal urethral sphincter

(smooth muscle), and striated external urethral sphincter. The submucosal layer is highly vascular. These vascular cushions, along with the urethral mucosa, account for approximately one third of the urethral resting tone, while the internal and external urethral sphincters account for the remainder.<sup>24</sup> The internal urethral sphincter is composed primarily of oblique and longitudinal smooth muscle fibers, with a few circularly oriented outer fibers. The precise function of this longitudinal smooth muscle is not known, but Schafer makes a strong argument on biomechanical grounds that these longitudinal fibers serve as "filler volume" within the circular smooth muscle and striated urethral sphincter and that their presence improves the efficiency of the sphincter mechanism by allowing closure of the urethral lumen with only a small amount of circular muscle shortening.<sup>25</sup>

The skeletal muscle component of the urethral sphincter consists of the external urethral sphincter (also called sphincter urethrae) along with the previously described compressor urethrae and urethrovaginalis muscles. These three muscles, which function as a single unit, have been called by Oelrich the striated urogenital sphincter.<sup>27</sup> Together, they are approximately 2.5 cm long and encircle the urethra in its mid-portion from just below the bladder neck to the perineal membrane within the deep perineal space. The striated urogenital sphincter provides approximately one third of urethral resting tone and is responsible for the voluntary and reflex increases in intraurethral pressure needed to maintain continence.

Normal urethral function depends upon normal support of the urethra as well as its intrinsic sphincter mechanism. As with vaginal support, dynamic interaction between the levator ani muscle complex and the connective tissue supports of the urethra is essential. The urethra lies on a hammock-like supportive layer composed of periurethral endopelvic fascia and anterior vaginal wall.<sup>26</sup> Increased intra-abdominal pressure, as with a cough or sneeze, causes compression of the urethra against this hammock-like layer thereby compressing the urethral lumen closed. The stability of the suburethral layer depends on the intact connection of the anterior vaginal wall and its connective tissue attachments to the ATFP and levator ani muscles. These attachments allow the pelvic floor muscle's normal resting tone to maintain the position of the urethra and bladder neck. They are also responsible for the posterior movement of the vesical neck seen at the onset of micturition (when the pelvic floor relaxes) and for the elevation noted when a patient is instructed to arrest her urinary stream.



**FIGURE 8.** Muscles of the obturator compartment. The superficial muscles are illustrated on the left. On the right, the superficial muscles have been made transparent to allow depiction of the deeper muscles.

Defects in these attachments can result in proximal urethral support defects (urethral hypermobility) or anterior vaginal wall prolapse (cystocele), and can contribute to stress urinary incontinence.

## ■ OBTURATOR ANATOMY

The obturator membrane is a fibrous sheath that spans the obturator foramen through which the obturator neurovascular bundle penetrates via the obturator canal. The obturator internus muscle lies on the superior (intrapelvic) side of the obturator membrane. The origin of the obturator internus is on the inferior margin of the superior pubic ramus and the pelvic surface of the obturator membrane. Its tendon passes

through the lesser sciatic foramen to insert onto the greater trochanter of the femur to laterally rotate the thigh. The obturator artery and vein originate as branches of the internal iliac vessels. As they emerge from the cranial side of the obturator membrane via the obturator canal and enter the obturator space, they divide into many small branches supplying the muscles of the adductor compartment of the thigh.

Recent cadaver work by Whiteside and Walters has contradicted previous reports that the obturator vessels bifurcate into medial and lateral branches.<sup>27</sup> Rather, the vessels are predominantly small (<5 mm in diameter) and split into variable courses. The muscles of the medial thigh and adductor compartment are (from superficial to deep) the gracilis, adductor longus, adductor brevis, adductor magnus, obturator externus, and obturator internus (**Figure 8**).

In contrast to the vessels, the obturator nerve emerges from the obturator membrane and bifurcates into anterior and posterior divisions traveling distally down the thigh to supply the muscles of the adductor compartment. With the patient in the dorsal lithotomy position, the nerves and vessels follow the thigh and course laterally away from the ischiopubic ramus.

## ■ CONCLUSIONS

Although human anatomy is unchanging, our understanding of the functional anatomy of the pelvic viscera and the biomechanics of pelvic organ support continues to evolve. Familiarity with the contemporary views of female pelvic organ support is essential as we refine established methods for surgically correcting pelvic organ prolapse or consider adopting new and innovative technologies. The fundamentals reviewed in this article should serve as a useful foundation for the practicing pelvic reconstructive surgeon.

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# Plastic fantastic: Sex robots and/as sexual fantasy

Sexualities  
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## Abstract

This article provides an interdisciplinary and intersectional analysis of sex robots and/as sexual fantasy. I demonstrate that sexual fantasy is a highly complex and salient vector of analysis for any discussion of love and sex with robots. First, I introduce contemporary North American sex robots and offer a brief sketch of their ontology as relates to sex toys and pornography. Next, I provide a short but instructive mapping of sexual fantasy scholarship from across the fields of experimental psychology, media and cultural studies, post-colonial, psychoanalytic, feminist, queer and critical race theory. My goal here is to demonstrate sexual fantasy's polymorphous and productive nature and its complex relationship to reality. Drawing on the theories of sexual fantasy canvassed herein, I examine the role of fantasy to sex robots, inception, marketing, and consumption. From here, I offer an appraisal of radical feminist, new materialist, and disabled queer and trans feminists' critiques of sex robots and their users. I argue that theorizing sex robots through the lens(es) of sexual fantasy is necessary given efforts to stigmatize, regulate, and criminalize sexual fantasy and sextech users in the post/digital age. Future scholarship is encouraged to further examine the sex robot/sexual fantasy nexus and to consider whether and how their intersections impede or facilitate the development of alternative "networks of affection" including those that lie between the platonic and romantic or between "carbonsexuality" and technosexuality/digisexuality.

## Keywords

sex robot, sexual fantasy, sextech, intersectional, digisexuality

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## Introduction

I have yet to experience an actual sex robot, but I am already enamoured. Literature has brought me here: Philip K. Dick's classic *Do Androids Dream of Electric Sheep?* (1968); Samantha Hunt's short story *Love Machine* (2007); Jeanette Winterson's *Frankissystem* (2004). These are just a few of the narratives that have seduced me while simultaneously exposing humanity's anxieties about the slow march from private orgasm *à petite mait* to robocalypse—our moral and physical annihilation. No longer restricted to the mind, the page, or the screen, sex robot scholars have argued that [a]dvances in the fields of artificial intelligence, biomechanics, robotics, and animatronics have caused a fundamental shift of the narrative from the imaginary to the tangible, from fiction to facticity (Kubes, 2019b, 1). This article conceptualizes sex robots at the intersections of these categories as 'tangible imaginary,' as 'factitious fiction,' or as I refer to them here as 'manifest fantasy.' Given that sex robots' relationship to sexual fantasy is often ignored or relatively undertheorized in the existing literature (Köring et al., 2020), this article demonstrates that sexual fantasy is a highly complex and salient vector of analysis for any discussion of love and sex with robots (Levy, 2007).

This article proceeds in four parts. First, I introduce contemporary North American sex robots and offer a brief sketch of their ontology as relates to pornography and sex toys. Next, I provide a short but instructive mapping of sexual fantasy scholarship from across the fields of experimental psychology, media and cultural studies, post-colonial, psychanalytic, feminist, queer and critical race theory. My goal here is to demonstrate sexual fantasy's polymorphous and productive nature and its complex relationship to reality. Drawing on the theories of sexual fantasy canvassed herein, I examine the role of fantasy to sex robots' inception, marketing, and consumption. From here I offer an appraisal of radical feminist, new materialist, and disabled queer and trans feminist critiques of sex robots and their users. Ultimately, I argue that a more affirmative and optimistic assessment of sex robots and their users is possible, and that theorizing sex robot through the lens(es) of sexual fantasy is necessary given efforts to stigmatize, regulate, and criminalize sextech users and sexual fantasy in the post-digital age. Future scholarship is encouraged to further examine the sex robots/sexual fantasy nexus and to consider whether and how their intersections impede or facilitate the development of alternative networks of affection (Plog, 2019) and 'alterious sexualities' (Hearn, 2018), including those that lie between the platonic and romantic, or between what I call 'carbon-sexuality'—a sexual preference for organic humans—and 'techrosexuality/digisexuality'—the attraction to veneration, and use of technology for sexual and intimate purposes (Bardzell and Bardzell, 2016; McArthur and Twist, 2017).

## Sex robots in 2021: notes on ontology and anxiety

Sex robots are defined here as human-looking, anatomically correct doll/robot hybrids that interact with their users via the integration of sensors and artificial intelligence (AI). Key here are the RealDoll<sup>®</sup> models designed by Realbotix and commercially available by US manufacturer Abyss Creations RealDoll. Conceptualized as 'a low-cost embodied

highly customizable, infinitely patient human-scale personal companion" (Coursey et al. 2019: 86), these first-generation dollbots sport an android head that is capable of eye and facial contour for speech and emotive expression (Coursey et al. 2019: 85), a silicone body, a "conversational system" designed to address mature topics (Coursey et al. 2019: 88), and an xMode application that links users to their robots and allows them to choose a desired voice, personality type, and provide a degree of machine learning about the user's interests and preferences (RealDoll Harmony N.d.). As with RealDoll's silicone sex dolls, the RealDoll<sup>®</sup> models are expanding in range and popularity. Harmony, the company's original sex doll and now its first sex robot (Harmony<sup>®</sup>), is visually young, white/European/North American, with freckled skin, full pink lips, blue eyes, petite facial features, straight long blond hair, very large breasts, very small waist, flat stomach, and long hairless legs devoid of veins or cellulite. Soana<sup>®</sup>, her new and darker "sister," is readable as Spanish/South American (based in part on the origins of her name). She shares a similar body type to Harmony<sup>®</sup> but is slightly darker in skin tone with a wider nose, long dark straight hair, dark wine-red lips, and darker nipples. Readable as the exoticized and racialized "Other," Soana's tan skin and blue eyes nevertheless mark her as falling within gradations of whiteness (Dyer 1997: 12). The same can be said of the three newest models—Noya, Tonya, and Serenity—all of which are advertised as light-skinned, if not white, with customizable hair, eye color, breast size, nipple and labia shape, and pubic hair.

Sometimes classified as smart sex toys (Schultz and Arnold 2016; Wiseman 2015), sex robots are also distinguished from sex toys based on their fully embodied, hyper-realistic, and relatively interactive humanistic form (Chatterjee 2013; Devlin 2018). While some suggest that sex robots' life-size and embodied elements facilitate intimacy and emotional attachments beyond that which is typically experienced with disembodied sexual aids (Carpenter 2017; Levy 2007), others suggest that the process of anthropomorphizing is not limited to sexbots (Darling 2016). As roboticist Kate Darling argues,

The human form is overrated and overused. We can put emotions into everything from blobs to chairs. (Corbyn 2021) To the extent that sex robots are conceptualized as sex toys, there is reason to believe that they may democratize the sex toy market by further destigmatizing sex toys for men much as sex toys have been for women (Cornella 2017).

For many, however, sex robots' gendered and racialized humanistic form, as well as their pornified esthetics, invoke concerns directly out of the feminist sex wars playbook (Bracewell 2016; Duggan and Hunter 2006)—namely fears that sex robots stand in for and objectify and women, eroticize social domination, and normalize and promote sexual violence—thus mirroring radical feminists' concerns about pornography, prostitution, and S/M fantasy play. For instance, UK ethicist and self-proclaimed radical feminist Kathleen Richardson established the Campaign Against Sex Robots (CASR) based, in part, on the supposition that sexbots reinforce "prostitute john [relations]—[and] the use of women and children as sex objects, [and] corrode human empathy" (Keim and Lim 2018: 11). More recently CASR has changed its name to the Campaign against Porn Robots (CAPR) because, according to Richardson, "They're pornbots, they're actually pornography. What the dolls are actually mimicking are the women in pornography. They're a version, from this masculinist, male patriarchal point of view, a very degraded

view of women, reduced to a form with penetrable holes that can be sold off and commercialized and circulated among men' (Campaign Against Sex Robots, n.d.). And yet, what little we know about sex doll and robot consumers at this point indicates that for them the fantasy of intimacy with a "brought to life-partner" via doll personalization, modifications, online textual narratives and shared photographic poses—creates an "embodied intimate fiction" (Su et al. 2019: 28) that may distinguish their experiences from those between porn consumers and the porn stars they idolize (Courtsey et al. 2019, Jackson et al., 2019).

While sex toys' and pornography's relationships to sexual fantasy has met with sustained scholarly inquiry, apart from the few sources discussed below the same cannot be said of sex robots and their users. What research does exist favors psychological and psychoanalytic analyses of sexual fantasy's perils. The following section thus presents a circumscribed interdisciplinary and intersectional mapping of sexual fantasy's complex ontology, affects, and effects, before offering an appraisal of sexual fantasy's significance to the design, marketing, consumption of sex robots, and to scholarly analyses of both dollbots and their users.

## **Sexual fantasy across disciplines**

In the service of theorizing sex robots as sexual fantasy this section reviews sexual fantasy's vicissitudes. Referencing theories from across the fields of experimental psychology, cultural and porn studies, post-colonial, critical race feminist, and queer-of-color theory, it provides a snapshot of sexual fantasy as simultaneously conscious and uninhibited; unconscious and repressed, as private and as public, as apolitical, as individual and as collectively experienced and enacted, as produced by, and productive of, social relations, and as a mode of oppression and resistance. In doing so, it demonstrates sexual fantasy's myriad manifestations and its complex relationship to reality.

## **Sexual fantasy as individual and conscious**

Sexual fantasy is commonly understood as an individualistic and conscious practice that is distinct from reality (Ing. 2020; Neuman, 2014). From within the positivist field of experimental psychology, sexual fantasy is described as "deliberate patterns of thought" which "can be generated by and generative of sexual arousal: a product of our vast imaginary capabilities and/or triggered by something we read or see" as well as an "integral part of everyday human existence, with clinical and social significance" (Leitenberg and Henning, 1995: 492). Psychologists regularly ask, how many people have fantasies? who has them?, when do they have them? as well as, what their fantasies are comprised of and whether a relationship exists between fantasies, sexual behavior and sexual offending (Leitenberg and Henning, 1995). Findings are often distinguished along cis-gendered male/female lines often with little explicit intersectional analysis or reflection on the heteronormative, cis-normative, and racial dynamics at play in individual studies or in the discipline of psychology more broadly (Barker 2007; Riggs, 2007; Roberts et al. 2020). What emerges are limited yet instructive studies about races, types

and the gendered dimensions of individuals' sexual fantasies. Work from within this discipline suggests that (cis-gender, mostly white, and heterosexual) men and women have sexual fantasies at an approximately equal rates yet men appear to fantasize about sex more often throughout the day (Leitenberg and Henning, 1995: 473); men report a higher diversity of sexual fantasies than women (Joyal et al., 2015); women imagine having something sexual done to them whereas men imagine doing something sexual to their partner; and men have more explicit and visual imagery in their fantasies as opposed to women who conjure more emotional and romantic imagery (Joyal et al., 2015: 337).

Central to psychological analyses of sexual fantasy are concerns with paraphilia and the distinction between normal/abnormal and typical/unusual fantasies. Here, however, studies suggest that very few fantasies are statistically rare or unusual and that the field should be careful before labeling a sexual fantasy as unusual, let alone deviant. Rather than focus on the content of fantasies, Joyal and colleagues suggest that the emphasis should be "more on pathological aspects such as rigidity and necessity of certain sexual fantasies" (Joyal et al., 2015: 335, 336). While evidence exists to support the finding that sexual offenders have sexually arousing fantasies about sexual offences and masturbate to these fantasies, this association does not necessarily mean that the fantasy caused the behavior any more than the behavior caused the fantasy, and that "the evidence is mixed as to which occurs first, fantasy or behavior" (Leitenberg and Henning, 1995: 487). One's fantasies do not necessarily indicate a desire to experience the fantasy "in reality," a conclusion that is evidenced by individuals' enjoyment of rape fantasies and their unwillingness to actually rape/be raped (Bivona and Critelli, 2009).

## **Sexual fantasy and the collective unconscious**

In addition to psychology's analysis of sexual fantasy as relatively individualized, conscious, common, and healthy to the extent that it is distinct from wish-fulfillment, sexual fantasy has also been theorized by psychoanalyst, cultural studies, and feminist scholars as culturally produced and as productive, thus complicating the boundary between fantasy and reality. Given that the scope of scholarship across this realm is too broad to do justice to, this section limits its focus to a few theories of the "problem" of sexual fantasy. Key here is critical race and post-colonial psychoanalytic scholar Franz Fanon's argument that the origins of colonialism and the racialized Other can be traced to the colonizer's repudiated and repressed sexual fantasies about the Negro's genital potency – what Tamar Katoosa calls the Black Phallic Fantastic (Katoosa, 2021). For Fanon, this myth is not merely an image in mind of the colonizer, but rather one that is faithfully reproduced in and imposed by public rhetoric and discursive and semiotic representational texts – from children's books to theater, film, and beyond (Fanon, 1952: 169). Together these fantasies and cultural impositions structure and constrain the collective unconscious – how the colonizer and colonized come to know themselves, their belonging and value in history and society (Fanon, 1952: 191).

Sexual fantasy's impositions and constraints have also long underpinned Post-Freudian, psychoanalytic, and feminist theories of sexual fantasy. Having canvassed this body of literature and findings from his joint study of peoples' engagement with

online pornography (with Clarissa Smith and Eeona Attwood), cultural studies scholar Martin Barker offers two key insights. First, that sexual fantasy is primarily viewed amongst the psychoanalytic and feminist literature as singular and wild, as at best of limited value and at worst as “adolescent deficient and dangerous” and in need of careful management (Barker 2014: 148). Second, that while fantasy plays a central role in pornography’s consumption, fantasy is “varied and multiform in purpose” (144) and serves people in a number of different ways (2014: 155). In keeping with Fanon, Barker dismisses the claim that one can lose the distinction between fantasy and reality, suggesting that this distinction is itself nonsensical because fantasy exists at the intersections of one’s sense of self, between bodies, and amidst social and cultural norms with myriad private and social affects and effects. However, unlike Fanon, Barker suggests that fantasy’s plurality and productivity means it is equally capable of being used “exploitatively and hurtfully” or “constructively, to explore and build sexual relations of great power and pleasure” (Barker, 2014: 155).

### **Sexual fantasy at the intersections**

Amidst this anxiety and optimism about sexual fantasy arise questions about whether and how we ought to—or can—decolonize our sexual psyches, thus, unchaining our fantasies, desires, and selves from what Juana María Rodríguez calls “the oppressive pornographic narratives of racist patriarchy” (Rodríguez 2011: 337). Drawing on Judith Butler’s idea of the “critical promise of fantasy”—fantasy’s ability to “challenge the contingent limits of what will and will not be called reality”—thus enabling us “to imagine ourselves and others otherwise” (Butler 2004: 29)—Rodríguez outlines a “sexual fantasy remix” wherein “racialized women and the disabled, along with indigenous populations, slave societies, immigrant groups, welfare recipients, prisoners, gender-queer subjects, and other bodies marked as deviant” stare into the face of racialized erotics and pain in a gesture of critique and imagination that attempts to unravel both individual subjectivity and the existing social relations that surround us (Rodríguez 2011: 343). Fantasy’s critical promise is thus offered as a means of conjuring a queer anti-supremacist sociality. In contrast to Fanon’s rejection of a politics of recognition as a way out of abjection and hurt (given that this recognition rests on the “eravation” of the Black subject to the already racialized as white idea of the human), Rodríguez advocates on behalf of recognition, and the social bonds it may create. “Through our real and imagined sexual encounters,” Rodríguez writes, “queers enact the possibility of disentangling bodies and acts from preassigned meanings, of creating meaning and pleasure anew from the recycled scraps of dominant cultures” [and] of remarking and remaking the pain and release of social intelligibility that constitute our daily lives” (2011: 338).

A similar “sexual fantasy remix” is advanced in Ariane Cruz’s analysis of Black women’s sadomasochistic race play—wherein black women and white men (among other interracial configurations) sometimes serve as slaves to white men’s plantation fantasies. Drawing on interviews with Black female practitioners of race play, Cruz concludes that the journey into racialized sexual fantasies is as much about “working out and through a Black female (un)consciousness haunted by a history of sexual violence” as it is about



'innovating fresh modes of accessing pleasure' (Cruz 2015: 434–435). The elaborate 'play of race' she argues, demonstrates the 'fragile yet formidable boundaries between the constructs of fantasy/ reality, inside/outside, mind/body, and Black/white' (Cruz 2015: 435). Thus, both Rodriguez and Cruz demonstrate '*just how permeable none-the-less vital the line between fantasy and reality is*' (Cruz 2015: 428. Emphasis added), as well as the opportunities sexual fantasies provide for imagining, negotiating and creating alternative sets of social and sexual relations.

## Sex robots and/as manifest sexual fantasy

Taken together, the above theories of sexual fantasy establish that sexual fantasy must be understood as "a complex realm of subterfuges and satisfactions as well as terrors" (Cowie 1992: 150). And yet, sexual fantasy remains an undertheorized aspect of sex robot debates. Where sexual fantasy is acknowledged, terror reigns. This section analyses how sexual fantasy informs the design, marketing and consumption of sex robots, and argues that a more affirmative and optimistic assessment of seemingly normative sex robots, users, and their fantasies, is possible. Moreover, I suggest that such an analysis is necessitated by emerging efforts to stigmatize, regulate and criminalize both sex robot users and sexual fantasy in the post-digital age.

## Plastic fantastic: origin stories and sales pitches

According to Matt McMullen (artist, sculptor, founder and CEO of RealDoll and Realbotix) and Dr. Kimo Coursey (computer scientist and AI/VR designer at Realbotix), sexual fantasy played no conscious role in McMullen's creation of the human figures that would become Harmony and later the Model<sup>3</sup> line of dolls/bots. Rather, McMullen had set out to create a 'fashion mannequin that could pass a fast visual Turing test, in that at a glance an unobservant observer might not notice that the mannequin was not human' (Coursey et al. 2019: 79). Department stores, however, expressed little interest in McMullen's tall, skinny, poseable creations. Only after he received, and dismissed, inquiries about his dolls' anatomical correctness did he begin seriously considering requests for shorter and curvier "sex capable" options. As an artist, McMullen felt compelled to create products that satisfied both his clients' requirements and his own aesthetic tastes (as any artist would) (McMullen, personal communication, 2022). While he may have tapped into his own fantasies when hand producing each doll, given that each figure took 3–6 months to complete and was costly to produce, ultimately consumer demand, the fragility and weight of its materials, and the need for a sustainable business model dictated the dolls' final form (McMullen, personal communication, 2022), not, as some might assume, an explicit effort to materialize and objectify hegemonic sexual fantasies.

Despite this origin story, RealDoll's name and its tag lines explicitly reference sexual fantasy at times distinguishing fantasy from reality and at other times collapsing the two into one another. For example, at the time of writing, RealDolls' website invited its browsers to "Dream your wildest fantasy into reality" but also to "Get Real. Nothing



beats the real thing' (RealDoll, n.d). While the first tagline (Dream your wildest fantasy into reality) reinforces a clear distinction between fantasy and reality, the second (Get Real: Nothing beats the real thing) blurs these boundaries. For instance, 'getting' 'the real thing' can be interpreted as both 'the best dollbot on the market' (as opposed to a knock-off), and a 'real' (read: cis-female) woman, or at least the feeling of sex with one. Indeed, by replacing 'purchase' or 'buy' with 'get', RealDoll facilitates the fantasy of 'scoring' a hot date—based on one's inherent talents or charm—rather than on purchasing sex, which is often linked to one's buying power and presumed lack of sexual appeal. At the same time, the tagline calls for consumers to 'get real'. While this can be interpreted as a literal demand to acquire a RealDoll, used colloquially, 'get real' is an idiom that implies the need to 'confront reality, to realize something seriously, stop daydreaming and face the truth,' and 'give up artifices' (OED Real, n.d). As such, 'get real' tacitly reinforces the fantastical nature of the transaction, reminding the potential consumer that a RealDoll might be their best option given how unrealistic it is that they can 'get' a human woman that is as hot as one of their robots and who will 'do' what a RealDoll can do for them. A similar double move is facilitated by the company's combination of 'real' and 'doll' in its name. Originally coined as a 'sweetheart, mistress, paramour,' the term 'doll' shifted in the 1770s to describe 'a child's toy baby' before transferring back in 1778 'to living beings' in the sense of 'pretty, silly woman' and then, by the mid-20th century to an endearing or patronizing name for a young woman' (Online Etymology Dictionary, n.d). The 'doll' in RealDoll thus refers to both an objectified subject and a subjected object. Combining Real and Doll thus serves as a sort of perlocutionary act: one meant to help convince the consumer they are fulfilling their fantasy of realizing both an inanimate plaything and an animated lover.

Sex and sexual fantasy simultaneously drive and take a back seat to the development of the Model\name. According to McMullen, Realbotix's design team 'started by animating Harmony's face to add personality and expression, rather than focusing on sexual gyrations, because she is more about companionship than sex' (Bartneck and McMullen 2018). At the same time, each unit is equipped with an interactive interface module, animation, and magnetics that allow users to attach different faces to the same underlying mechanism, thus facilitating personalization 'for various genders and fictional species' (Coursey et al. 2019: 84), a design detail that aligns with effort to facilitate sexual fantasies involving mythical creatures and fictional characters.<sup>5</sup>

## Perilous plastic fantasies?

Sexual fantasy also appears to varying degrees, in both mainstream and scholarly analyses of sex robots. Media sources from across the political spectrum refer to sex robots as embodying and facilitating primarily normative and deviant fantasies, including fantasies about 'up for anything' sexual partners (Gibson 2016), threesomes (CBC Radio 2017), and, more frequently, fantasies of sexual domination, submission, and rape (Cheung 2022; Ghosh 2020; Knapp 2017). Interestingly, the fantasy of 'sex with a robot' is rarely explicitly acknowledged. Here, sex robots are sometimes referred to as a 'technology driven by male masturbatory fantasies' (Moore 2017), with some

suggesting that “Cyborg sex” more than likely foretells the sad future of erotic phantasy and the further disciplining of sexual pleasure (Rosen, 2017). Within academic scholarship, Alison de Fren’s analysis of ASFR (all sex fetish robots)—an internet fetish community centered on fantasies of robotic women—emerges as one of the first works to engage more closely with fantasy for RealDoll owners. As de Fren writes, amongst the community there is an acknowledgment of the tension between the fantasy of eternal life and beauty and concerns about the “programmable control [and use] of a human object” (De Fren, 2009: 409). As such, ASFRians are sensitive to the interpretation of ASFR as a technological elaboration of standard BDSM (bondage-domination sado-masochism) fantasies, in which one person dominates another for sexual pleasure, as well as “the perception that it represents the reification of normative gender ideals” (De Fren, 2009: 409). According to the ASFRians de Fren spoke with, these assumptions “keeps its members highly closeted in comparison to fetishists like the Furies and the Pussies (those who eroticize anthropomorphic and stuffed animals and animal costumes, respectively) and[] who hold dozens of public conventions each year throughout the world” (2009: 409). Indeed, ASFRians were “so concerned about the accusation of sadism or misogyny that they have coined a mantra or tagline oft repeated on their websites: ASFR is not about the objectification of women, it’s about the feminization of objects” (2009: 409), an assertion that has largely been ignored or dismissed by anti-sex robot activists and scholars.

In the decade since de Fren conducted her research, technodissexuality and the use of sex robots has come to be known by the mainstream (Hart, 2020; McCowan, 2019), prompting the Campaign Against Porn Robots’ founder, Kathleen Richardson, to ask: “Where do the fantasy images and products come from? Is fantasy just a neutral domain that is a sphere separated off from the ‘real’ and therefore unproblematic?” Answering her own question she claims that “fantasy and the ways that robots are seen show human relations at work: they ‘tell us about gender, power, inequalities, race and class’” (Richardson, 2016: 292). From here Richardson concludes that sex robots are the product of rape culture: that they facilitate rape fantasies, and embody fantasies about the perfect, passive plaything, thus resulting in the abuse and rape of real women (Gibbs, 2016; Richardson, 6/20/6a), a conclusion that much of the sexual fantasy research cited above complicates and even contradicts.

For Richardson, the vital if porous line between fantasy and reality and the possibility that sex robots may be generative of new sexual intimacies and realities is rejected wholesale. Richardson’s radical feminist critiques have since been nuanced by new materialist feminist and disabled queer trans scholars. Concerned that sex robots look and behave “like a pornographer’s phantasy come true” (Moran, 2019: 60), and are aimed at fulfilling “individualistic forms of satisfaction catered to meet the needs/fantasies of cis-straight people (white men mostly)” (Pug, 2019: n.p.), these scholars decenter gender oppression and robot abolitionism and instead offer intersectional responses aimed at problematizing the anthropocentric and “biocentric” nature of humanistic sex robots, their (purported) manifestation of white supremacist and colonialist fantasies about racial, gendered, and sexual superiority, and their endorsement of “hierarchical and exclusionary understandings of familial, romantic, platonic, erotic, and sexual relationships.”

(Kubes 2019a: 20–26; Moran 2019: Para. 31–4). For instance, Jenny Moran draws on Fanon and Achille Mbembe to argue that the racialized AI personalities of the now non-existent True Companion sex robot—namely the Arabic named “Frigid Farah” (who presumably does not consent) and Japanese named “Young Yoko” (who presumably cannot consent)—“neocolonially racialise their AI’s performance of consent by as signing rapeability to subjects upon whom non-Westernness is (incorrectly) ascribed” (2019: 42). Moran thus interpolates users who simulate rape using Young Yoko or Frigid Farah personalities as having internalized colonial and racist messages and as perpetuating “neopolitical rape culture” thus “strengthen[ing] discriminatory practices which oppress marginalized Peoples” (Moran 2019: 43). Drawing instead on Crip and trans theory, Krizia Puig makes similar connections between contemporary sex robots and genocidal social death. Referencing the erasure of nonnormative “bodyminds/pirits” from the “imagin[ing], theoriz[ing], experiment[ing], and produc[ing] of” sex tech (2019: 502) as well as sex robots’ hypernormative and cishetero “humanistic affective logics of time, space, and relationality” (2019: 510), Puig concludes that contemporary sex robots constitute a form of emotional genocide: “Not our bodies, nor our fantasies or hopes, nor the ways we love and grieve, nor our joy or our pain are considered within most projects of future-making” (2019: 510).

Both Moran and Puig’s engagement with critical race, post-colonial, Crip, queer and trans theory offer analyses of sex robots that go beyond single-axis critiques that emphasize gender oppression or, as Jenniffer Nash argues with respect to anti-porn feminists, that merely mobilize race as a peripheral “intensifier” to help bolster arguments that pornography is not “just fantasy” thus helping to “secure [feminists’] claims to pornography’s harms” (2014: 10). Considered in relation to Fanon’s political theory of fantasy referenced above, as well as to technology and cultural studies analyses of the intersections of gender, sexuality, race, representation, and tech (See Chan 2009; Hall 1997; Wajeman 2007), these authors raise legitimate concerns about sex robots as semiotic texts with complex relationships to social relations. Nevertheless, missing from these works is an attentiveness to sexual fantasy’s vicissitudes and affordances. As such, these works offer “paranoid readings”—that is, readings which “represent a way, among other ways, of seeking, finding, and organizing knowledge” (Sedgwick 2003: 126). Given the complex nature, affects, and effects of sexual fantasy, it begs considering whether and how sex robots’ manifestation of seemingly hypernormative fantasies and their facilitation of ostensibly “deviant” sexual fantasies may in fact invite and extend “new bodily and erotic relations” (Karman 2019: 820), particularly given as Sedgwick notes the “many ways sexes and communities succeed in extracting sustenance from the objects of a culture—even of a culture whose avowed desire has often been not to sustain them” (2003: 150–151).

In this context calls to develop sex robots from “a gender-queer perspective” (Kubes 2019b: 4) arise, thus mimicking sex radical, sex positive, critical race, and queer calls for the transformation of the pornography industry, including calls for the proliferation of non-standard bodies, sexualities, scenarios, improved working conditions, and a broader set of (satisfied) consumers (DeFeney, *etc.* 2014). While such reforms have changed the pornography industry for the better (Laom, *no.* 2019), they have also resulted in questions

about the desirability of sanitizing and rendering sexual fantasy “politically correct” in all contexts (Nguyen, 2014). For instance, referencing Hoang Tan Nguyen, Rodriguez posits that for the historically sexually deviantized, racialized sexual fantasies may present an occasion to stare into the face of racialized erotics and pain in a gesture of critique and imagination that attempts to unravel both individual subjectivity and the existing social relations that surround us (2011: 343). She goes on to suggest that “To deny our fantasies because they are too complicated, too painful, or too perverse, to erase their presence or censor their articulation in public life, constitutes a particular kind of insidious violence that threatens to undermine our ability to explore the contours of our psychic lives, and the imaginary possibilities of the social worlds in which we exist” (Rodriguez, 2011: 343). Of course, critical race scholars such as Rodriguez, Cruz, Nguyen, and Nash develop theories of the revolutionary potential of sexual fantasy within the realm of racialized pornography and sadomasochistic play from the perspectives of the most deviantized sexual subjects: namely racialized, queer, trans, and disable women. The question then becomes whether the utopian potential of sexual fantasy is restricted to certain abjected subjectivities and scenarios, and whether normative seeming sex robot users and their fantasies can be understood in more benign or even more positive terms than are currently available. To begin to answer this requires more insights about sex robot consumers.

## Silicone users and abusers?

To a degree, the assumption that sex doll and robot users are a relatively privileged group, not the sexual subjects who have historically been socially and psychically abjected, dominated, and “punished most viciously for seeking out the pleasures of perverse sexual license” (Rodriguez, 2011: 336), is correct. Despite the growing number of people who fantasize about and express a willingness to have sex with robots (Lehman et al., 2018; Rapierowicz, 2021), approximately 80% of sex doll owners are a majority cis-gender, white, men (Su et al., 2019), with a degree of financial privilege (given the high cost of realistic sex dolls and doll-bots), while 20% are couples and females (Dering et al., 2020: 13). Emerging research on sex doll users suggests that while a minority of consumers are “Men Going Their Own Way” men’s rights activists, the majority of users reject misogynistic views of women as well as heterosexual and monogamous constraints placed upon their sexual and intimate needs (Hanson, 2021).

Extrapolating further from existing sex doll literature, these men are privileged in that they are no more lonely, desperate, or socially inept than those in the general US population (Szczuka and Kramer, 2017), nor do they exhibit significantly higher rates of mental illness (Valverde, 2012). Any attempts to condemn them based on the assumption that male use of sexual objects deviates from “statistical sexual norms” (Szczuka and Kramer, 2017: 4) or that users are “fetishists” (De Fren, 2009; Valverde, 2012) ignores the fact that both object fetishism (sexual arousal from the erotic use of inanimate, nonliving objects) (Rees and Garcia, 2017) and men’s use of flesh lights (Lampen, 2017) and vibrators (Reece et al., 2009) is relatively common and positively experienced within the North American context. Although sex doll users have been found to experience “above-average problems with sexual functioning” (Valverde, 2012: 30), this is arguable a

normative evaluation that reifies the primacy of the ejaculatory penis above other organs, acts, pleasures, and intimacies, and ignores the growing destigmatization and usage of “erectile dysfunction” drug for medical and recreational purposes (Marsh and readers 2017).

Notwithstanding their privileges, these men are also deviantized and marginalized in mainstream narratives (Berenstein and Arkin 2009; Di Nucci 2011) where they are regularly depicted as deprived victim loners (BBC News 2019), sicko “creeps” (Eichen 2018), pervy “johns” (Aman 2009; Comeau 2018), and pre-criminals (Douthett 2018). Although the source of their abjection is multifaceted, evidence suggests that this abjection flows, in large part, from the explicit parallels drawn between them and rapists, porn consumers, and sex work clients. That is, to the extent that sex robots are understood as commercialized manifest fantasy and as a means of playing out (common) SM and rape fantasies, the men who consume them have been framed as users and abusers, as perpetrators of rape culture, as yet another source or symptom of a pornographic “public health crisis” (Blant and Stardus 2021), and/or as “unworthy” clients of commercial sex (Pheterson 1993) who must be shamed, stigmatized, and criminalized (Weitzer 2018).

In this context it is worth considering whether sex robot consumers can be understood as deviantized or even as queer sexual subjects in the same way some have suggested that “deviantized” sex work clients should be theorized (Khan 2009). Indeed, additional support for the queerness and homosociality of sex robot users is evidenced by emerging analyses of male sex doll users and communities (Hart Miller and Aki 2013; Middlweek 2021; Su et al. 2009), as well as within the personal narratives of female sex robot consumers such as that of queer artist Amber Hawk Swanson. For instance, grappling with her difficulty finding a female partner, Hawk Swanson found herself admiring, sympathizing, and identifying with the online community of “doll husbands”—men who owned and loved their own RealDolls—and in 2006 commissioned a life-size RealDoll (not a robot) in her own image. Of her art, Gretsy writes that Hawk Swanson disrupts “clucked (heterosexual) fantasies of lesbian desire and of twin sexuality, both of which repeatedly surface as erotic ideals in popular culture as well as mainstream pornography” (2013: 469) while also complicating the boundaries between “victimizing owner and victimized image, thus exposing ‘the anxious interdependence of self-objectification and self-realization’” (2013: 474 and 475). Hawk Swanson’s subsequent conversations with doll users in her collection entitled *Doll Closet* (2017), draws on the closet metaphor to signify the stigmatization that keeps doll owners hidden, while also acknowledging the closet as a necessary space for sex doll bots that must be hung to avoid being damaged. Of the iDollators she speaks with at least one is racialized—the internationally known Duvecat—whereas others gender-bend and express their own heterosexual desires alongside a disidentification with heteronormativity. To this resource we can add the growing body of media coverage that exposes sex doll users as running the gamut from heterosexual married couples to interracial, poly couples and single queer men (Heck 2013; Pemberton 2020). Taken together with qualitative analysis of male users of a major sex doll forums, it thus begs considering how—in the absence of empirical research otherwise—we need not presuppose that human–sex robot relationships will increase hegemonic or toxic forms of masculinity, and whether these new



relationship configurations may usher in new identities, communities or 'liberated forms of sexuality' that enhance our lives with novel forms of mechanized pleasure (Muddleweek 2021: 383). To the extent that emerging studies of sex doll bot and their users help to reveal the 'myth of a natural, monolithic heterosexuality' [and the] 'capriciousness of its logic' (Burt-Miller and Aoki 2013: 386), it becomes possible to view the idea of the 'hegemonic sex robot user' as itself a 'fantasy' and to question the construction of sex robot consumers as singularly privileged male users and abusers with oppressive sexual fantasies.

## Conclusion

Scholarly analyses of sex robots' relationship to sexual fantasy are rare (Doring et al. 2020). In those instances where sexual fantasy is considered it is overwhelmingly condemned as 'too normative' or 'too deviant' as mimetic of and a means of reifying structural oppression and as in need of aesthetic reformation, sanitization, and regulation. Yet as the above interdisciplinary mapping and analysis of sex robots and as sexual fantasy reveals, the fantasy/reality binary is concurrently fact and fiction. Sexual fantasy is polymorphous in form and multivalent in effects: it is simultaneously intangible narrative, manifest object, productive practice. Both reverie and reality, sexual fantasy is generative of private ecstasies, public injuries, and vice versa. Nevertheless, acknowledging the co-constitution and interdependence of fantasy and reality does not preclude their ability to be cleaved apart. It is possible, indeed necessary, 'to maintain fantasy as fantasy, not allowing it to become the basis for social norms' (Crewer 1997: 23) or the foundation for legal regulation. As is demonstrated here, the lack of a sustained and nuanced analysis of sexual fantasy's relevance to the design, marketing, and use of sex robots has contributed to the disintegrative shaming, surveillance, and governance of both sex robots and their users. In addition to public and scholarly opprobrium discussed above, Canada and the US have sought to criminalize some sex doll-bot users via the creation of new legal frameworks (Lieben 2018), the application of child pornography offences (Payette 2017), and the creative interpretation of municipal bylaws that prevent the operation of sex doll 'brothels' (Amin 2019; Comella 2018). In this context, asserting, as some have, that sex robots and their users *exclusively* manifest oppressive and violent hetero-patriarchal and racist sexual fantasies that "spill over into the real world" (Danaher 2019: 564) overemphasizes the 'presumptions' [of] representational realism that conflates the signified of fantasy with its (impossible) referent and construes depiction as an injurious act and, in legal terms, a discriminatory action or 'real-effect' (Butler 1990: 106). Such a conflation, although rooted in important analyses of the complex interdependence of fantasy and reality, denies the very real possibility of maintaining the two as distinct realms. Failing to acknowledge this is troubling, particularly in a contemporary context wherein exploring one's sexual fantasies via the use of the Internet and new sexual technologies is increasingly being conflated with, and criminalized as, abuse or as an hate crime (Gilden 2016). Given that, as Gilden demonstrates, "tension between protected sexual identity and marginalized sexual fantasy has become particularly acute" in the legal realm, and that "judges and juries in several areas of the law repeatedly conflate sexual



fantasy with sexual abuse have largely been dismissive of both the merits and value of fantasy-based defenses, and have relaxed evidentiary standards in ways that particularly prejudice individuals whose desires likely provoke disapproval or disgust' (2016: 423), there exists reason for sextech producers and consumers of adult to be concerned. In this context, sexuality, sextech, and socio-legal scholars are encouraged to further examine the perils *and* promises of sex robots and/as sexual fantasy, including whether and how their intersections invite new modes of affection, intimacy, and sexuality.

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### Notes

1. I refer to sex robots, *sexbots*, *sex doll-robots*, *sex doll-bots* interchangeably.
2. Attempts by RealDoll to mitigate critiques about their reification of a narrow beauty standard exist on their website. For instance, RealDoll acknowledges numerous requests for chubby or Big Beautiful Women (BBW) but suggests that their lack of size diversity is due to prohibitive weight of their materials and user difficulty (<https://www.realdoll.com/knowledgebase/do-you-wake-a-bbw-or-chubby-doll/>).
3. For an analysis of how "real" womanhood is conceptualized and defended by anti-sex robot anti-trans feminists see Tessa Penick (2021) "Dystopian Panic, Transphobic Hatred, and Annihilation Anxiety: Critiquing Radical Feminist Opposition to Sex Robots." MA Thesis, Carleton University, Ottawa, Canada.
4. It is worth noting, without being too reductive, that this five-member team includes chief roboticist Susan Pirzchalski, a white female VR/AR specialist Kuno Coursey, a Black man, and multipatform developer Yuri Furuushi, a Brazilian male.

5. Among the top 10 Pornhub searches in 2019 were more novel content such as pornography involving aliens, costumes, video game characters, and celebrities (<https://www.pornhub.com/insights/2019-year-in-review#searches>)
6. An insight arrived at in conversation with my dear friend and scholar Dana Georgis

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**Lara Karan, PhD**, is a critical criminologist, socio-legal, porn, and sexuality studies scholar at Carleton University. Her research examines the body, sexuality, identity, technology, law and popular culture. Her current federally funded research (SSHRC 2020–2025) examines sextech's sexual, criminal, and constitutional affects and effects. Professor Karan is an editorial board member of the journal *Porn Studies*. She has served as an Expert Consultant for national and international studies on young people's digital sexual expression and has served as an expert consultant on numerous criminal cases involving youths' intimate image creation and distribution.



## CLITORAL ANATOMY IN NULLIPAROUS, HEALTHY, PREMENOPAUSAL VOLUNTEERS USING UNENHANCED MAGNETIC RESONANCE IMAGING

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### Abstract

**Purpose**—We determined the magnetic resonance imaging (MRI) characteristics of normal clitoral anatomy.

**Materials and Methods**—A series of MRI studies of 10 healthy nulliparous volunteers with no prior surgery and normal pelvic examination was studied and the key characteristics of clitoral anatomy were determined. A range of different magnetic resonance sequences was used without any contrast agent.

**Results**—The axial plane best revealed the clitoral body and its proximal continuation as the paired crura. The glans was seen more caudal than the body of the clitoris. The bulbs of the clitoris had the same signal as the rest of the clitoris in the axial plane and they related consistently to the other erectile structures. The bulbs, body and crura formed an erectile tissue cluster, namely the clitoris. In turn, the clitoris partially surrounded the urethra and vagina, forming a consistently observed tissue complex. Midline sagittal section revealed the shape of the body, although in this plane the rest of the clitoris was poorly displayed. The coronal plane revealed the relationship between the clitoral body and labia. The axial section cephalad to the clitoral body best revealed the vascular component of the neurovascular bundle to the clitoris. The fat saturation sequence particularly highlighted clitoral anatomy in healthy premenopausal, nulliparous women.

**Conclusions**—Normal clitoral anatomy has been clearly demonstrated using noncontrast pelvic MRI.

### Keywords

clitoris, magnetic resonance imaging, anatomy, premenopause, parity

Although there has been some recent progress, advances in understanding male sexual function and dysfunction have not been paralleled by similar advances in female sexual function, even in basic anatomy and physiology. A problem facing researchers in female sexuality is the fact that the clitoris is largely an internal structure relative to the external visibility of the penis. Clitoral anatomy based on cadaveric studies have been limited by the lack of access to younger

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specimens with most being from elderly, postmenopausal women in whom erectile structures were distorted by the absence of blood flow and by the embalming process

Suh et al described detailed imagery of female genital anatomy using magnetic resonance imaging (MRI) with the blood pool contrast medium MS-325.<sup>1</sup> Visualization was poor or absent on T1-weighted images prior to contrast medium use. Two other reports from the same center indicated that this is useful for evaluating female sexual arousal.<sup>2, 3</sup> However, there is no comment on MRI obtained by the fat saturation technique and planes other than the axial plane are not provided. Prior studies also involved women in whom parity status was unknown. We present findings in a series of healthy premenopausal, nulliparous volunteers and describe clitoral anatomy as seen in each plane using unenhanced MRI. Dissection studies revealed significant age related atrophy, and so we expected that clitoral tissues of premenopausal women would be more easily distinguished with MRI than would tissues from an unselected group of women

## MATERIALS AND METHODS

An institutional review board approved MRI study was commenced at the University of Michigan, Ann Arbor in 1994. This prospective study involved the MRI evaluation of 240 patients, specifically to evaluate the effects of a first birth. Among these women were a consecutive series of 10 healthy nulliparous, premenopausal volunteers with no prior surgery and no abnormality on pelvic examination. They underwent several MRI sequences to test which of them best showed the pelvic floor structures. These scans form the basis of this study

Scanning techniques included T2-weighted fast spin-echo (FSE), T1-weighted spin-echo and proton density FSE with or without fat saturation. A 1.5 Tesla magnet machine was used to create the images. For most scans 0.4 cm section thickness with a 1.0 cm space between sections and a matrix size of 256 x 256 were used. Each scan was first examined to determine the features present in each plane (axial, corona, and sagitta) with each type of scanning. In a few series 1.0 cm sections were used and the sections omitted anatomical detail. For the purpose of clarifying clitoral anatomy only images using 0.4 cm section thickness are shown. All scans were then reexamined to determine the consistency with each of the features identified. The consistent findings are detailed. Structure identification was based on our previous published cadaver studies.<sup>4</sup>

Prior to analysis all images were converted into digital files masking identifying features (name and date of birth) of the individual. No other modification of the images was made

## RESULTS

Clitoral anatomy was shown most clearly in the axial plane. The sagitta, and coronal planes provided further details and they were complementary. Ultimately all components of the clitoris, crura, corpora, bulbs, glans and its neurovascular bundle could be clearly identified on MRI after the combination of the 3 planes was used. Each plane provided a different representation of the structure

Figure 1, A shows a typical axial proton density scan without fat saturation. The clitoris is ventral to the urethra and vagina. Its body projects into the fat of the mons pubis. It is composed of 5 components, namely the paired corpora united in the midline and separated only by a fibrous septum, the bilateral (vestibular) bulbs and the single glans. The glans is a more caudal structure and, therefore, it was seen in more caudal sections (fig 1, B and C). The corpora diverge and follow the pubic rami on each side, where they are called the crura. The clitoris is distinct from the urethra and vagina. In figure 1, A the target-like appearance of the urethra is particularly distinct with the urethral wall having a darker gray color than the surrounding

clitoris. The bulbs flank the urethra and vagina laterally. This axial section lies directly caudal to the symphysis pubis. The fat in this sequence is the whitest structure, followed by the cavernous tissue of the clitoris, the urethral lumen, the vagina, wall, the urethral wall and finally muscle in decreasing order of intensity. Dorsally the clitoris, urethra and vagina are related to the ischiorectal fat and in the midline they are related to the anal canal. The body of the clitoris is an angled structure that projects inferiorly into the mons pubis fat with its most caudal part continuous with the glans clitoris. Figure 1 *B* shows an axial section 1.0 cm caudal to the figure 1, *A* section. Because of the shape of the clitoris, the glans is typically seen in a more caudal axial section than the rest of the clitoris. In this woman the glans is seen in 2 sections (fig. 1 *B* and *C*). In the more caudal sections the urethra and vagina are not distinct and the caudal limit of the bulbs is just visible lateral to the urethra. The glans is the most distinct clitoral structure in these sections. In some women the urethral meatus was also distinct in the most caudal section.

The cavernous or erectile tissue was highlighted using a fat saturation technique. In this type of scan the fat appeared black and the cavernous structures of the clitoris were bright white (fig. 2). The urethral wall and vagina were also highlighted with this technique, although to a lesser extent than cavernous tissue. Other surrounding tissues, muscle and bone appeared as dark structures, increasing the contrast with the centrally placed cavernous structures. In axial section the clitoris formed a triangular complex with the urethra and vagina, namely the clitorourethrovaginal complex.

In figure 3, *A* the structures best seen are the vessels of the neurovascular bundles arising from the pelvic side wall, where the terminal component of the pudendal neurovascular bundle bifurcates into perineal and clitoral divisions to supply the clitorourethrovaginal complex. The perineal division is also best seen in figure 3, *A*, while the clitoral division, which ascends along the inferior pubic ramus adjacent to the crura, is best seen in figure 3 *B*. The neurovascular bundle is cranial to the clitoral body. The autonomic cavernous neurovascular supply to the clitoris is not visible on these MRI studies. The large clitoral neurovascular bundles on either side ascend along the ischiopubic ramus to the under surface of the pubic symphysis in the midline, from which they run along the cephalad surface of the clitoral body toward the glans. These bundles, which were easily seen using dissection techniques, were not large enough to be visible consistently on MRI, although fat saturation is known to highlight the vascular structures.

Sagittal scans demonstrated the angled clitoral body and glans projecting into the mons on the under surface of the symphysis pubis (fig. 4). The bulbs and crura were also visible in more lateral sections, although not well displayed. Coronal sections revealed the 2 corpora forming the body and ending as the glans clitoris (fig. 5). The body was seen attached to the under surface of the symphysis pubis. The labia minora and majora were well seen in this coronal section. The glans is visible extending more dorsal, toward the anus because of its tendency to curve dorsal and caudal.

Bulbar anatomy is best displayed in axial views and it was seen to a limited extent in sagittal and coronal views in all women. The bulbs met ventral to the urethra. Dissection studies have shown that they are not continuous across the midline.<sup>4</sup> They descend on either side of the urethra and flank the lateral aspect of the distal vaginal wall bilaterally.<sup>4</sup> The bulbs have a more consistent relationship with the clitoris and urethra than with the vestibule. Thus, in this study the bulbs are named the bulbs of the clitoris according to their consistent relationship to the clitoris.



## DISCUSSION

MRI studies of the clitoris complement studies previously performed in cadavers<sup>4</sup> and reveal the anatomy in healthy premenopausal nullipara. No major differences were apparent between findings in the cadavers and on MRI, although in cadavers the structures appeared to be atrophic, as would be expected because of the advanced age of most specimens and other reasons.

Historical, social, and scientific factors appear to be responsible for the poor presentation of clitoral anatomy even in current textbooks. Active deletion of the clitoris as a labeled structure from an early version of Gray's Anatomy compared with subsequent versions indicates the influence of social factors over science.<sup>5</sup> The medical profession has also had a major influence on female sexuality throughout history, particularly in the 19th century. The widespread practice in Western medicine of clitoridectomy for indications as diverse as epilepsy, hysteria, and cataplexy is relatively recent.<sup>6</sup> In addition to such factors, anatomists have compounded the poor display of clitoral anatomy by revealing it only in 1 plane. While the sagittal plane may suit the display of an essentially linear structure such as the penis, the clitoris is not well displayed in this plane. The axial plane is the most useful. As a multiplanar modality, MRI reveals each component of the clitoris and complements the information obtained at dissection.

This MRI study of the clitoris revealed each clitoral component in detail. The advantages of MRI over dissection based study are that it reveals anatomy in the living subject and it has the ability to enhance a given tissue because of its relative response to magnetic resonance. The MRI technique of fat saturation enhances cavernous tissue, of which the clitoris is composed. Fat saturation gives each clitoral structure a white appearance juxtaposed to all related structures, which are a shade of gray. Even the urethra and vagina, which are vascular structures, appear relatively gray by comparison to the clitoris. This indicates the highly vascular nature of the clitoris even in the nonaroused state.

Recent research has shown that MRI is capable of demonstrating vascular enhancement that may correlate with female sexual arousal, thereby showing great promise for sexual function studies.<sup>1-3</sup> The new, gadolinium based, blood pool contrast agent MS-325 administered intravenously has been found to provide an excellent depiction of the female genitalia in premenopausal and postmenopausal women.<sup>1</sup> The same agent has been shown to be useful in studying changes in female genitalia that occur with sexual arousal. The exact superiority of this contrast enhanced, T<sub>1</sub>-weighted study over the unenhanced fat saturation technique is not clear. MRI with phased array pelvic and endorectal coils has been shown to be an excellent tool for studying the female urethra and periurethral diseases.<sup>7</sup>

Objective imaging techniques such as MRI and even photography help overcome the inaccuracies associated with diagrams. The structures least well described in anatomical textbooks to date are the bulbs. Typically their relationship to the clitoris and urethra is not acknowledged or in fact said not to exist.<sup>8</sup> When depicted, the bulbs are usually drawn as if they pass alongside the vaginal introitus, forming the core of the labia. MRI clearly shows the extensive relationship between the urethra and bulbs, and also reveals how these structures are intimately related to the crura and corpora forming the root of the clitoris, an anatomical structure mentioned in some recent anatomical textbooks.<sup>9</sup> The view of the bulbs afforded by MRI shows even more clearly than with dissection that the bulbs on either side continue anterior to the urethra and meet together in the midline without merging. The exact role of the bulbs in urethral support and sexual function is unclear. Recent study has suggested they have a significant role in urethral continence.<sup>10</sup> The concept of the clitorourethrovaginal complex is

not new, having been called by French investigators after ultrasound based studies the "ensemble uretro clitoroduvulaire"<sup>11</sup>.

Previous studies have used confusing terminology or techniques that have failed clearly to demonstrate clitoral anatomy. Recently MRI of couples copulating have been shown in sagittal section,<sup>12</sup> the plane which in these studies least clearly displays the clitoris. In the same study the male subject only was administered sildenafil, relatively enhancing the signal intensity of the penis and further obscuring the clitoris. In another MRI study in which a woman with true hermaphroditism was depicted<sup>13</sup> the term corpus spongiosum was used in reference to the bulbs. In this study the clitoris was noted to be barely visible, part of the difficulty again being the choice of plane: is sagittal rather than axial, the latter being the plane of preference for clitoral anatomy.

## CONCLUSIONS

We observed that normal clitoral anatomy in healthy volunteers can be well displayed by MRI using fat saturation techniques without using any contrast agent. The bright erectile tissue of the clitoris surrounds the urethrovaginal complex anterolaterally. The bulbs are recognized as parts of the clitoris and they should be preferably called bulbs of clitoris rather than vestibular bulbs. Axial views are more useful for depicting most of the clitoris, and the sagittal and coronal planes are complementary. This study complements cadaveric studies of clitoral anatomy and provides further insights into the role and scope of MRI for demonstrating normal anatomy.

Professor John Hutson, Royal Children's Hospital, Melbourne supervised the dissection based female urogenital anatomy project.

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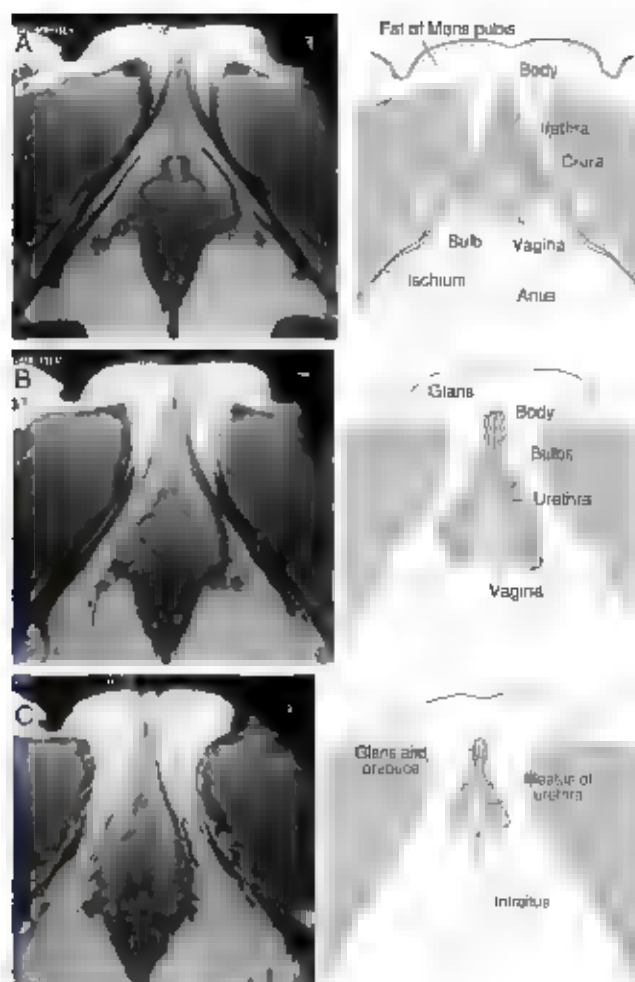
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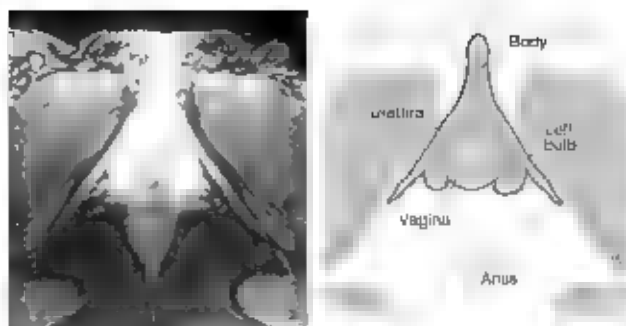
## APPENDIX

Each MRI study is accompanied by a diagram to highlight the clitoris: the anatomy of its components, neurovascular supply and the related structures: the urethra and vagina.



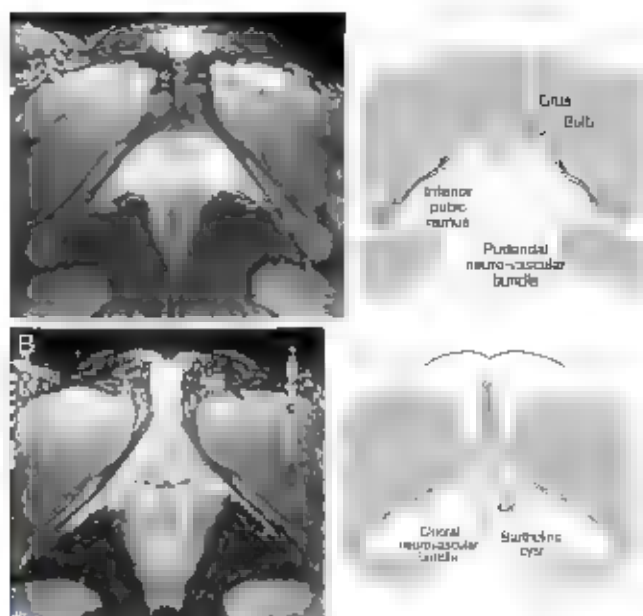
**Fig. 1.**

A, clitoris and its components, including bulbs, crura and corpora, are well demonstrated in axial plane. These structures lie ventral and lateral to urethra and vagina as cluster or complex. MRI specifications for this scan were FSE, TR 4000, TE 15/Ef, EC 1/1 16kHz, FOV 16x16, 4 0thk/1 0sp, 30/04 16, 256x256/2 NEX, FCs/NP. B and C, next 2 sections caudal to section A in same volunteer. B, clitoral glans ventral to remainder of clitoris. Its midline septum and prepuce are evident. C, most caudal section reveals glans and caudal limit of urethra (urethral meatus), clitoral bulbs and vagina (introitus). In this perineal section clitoral body and crura are not present and urethral meatus and vaginal introitus are not distinct. MRI specifications were FSE, TR 4000, TE 15/Ef, EC 1/1 16kHz, FOV 16x16, 4 0thk/1 0sp, 30/04 16, 256x256/2 NEX, FCs/NP.



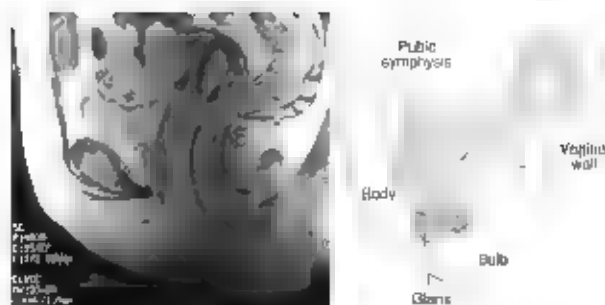
**Fig. 2.**

Using fat saturation highlighted cavernous tissue of clitoris surrounding urethra and vagina, while other structures appeared gray or black. Triangular clitorourethrovaginal complex was clearly seen using this sequence. MRI specifications were FSEIR, TR 4083, TE 22/Ef, EC 1/1, 31.2kHz, TI 165, FOV 20x20, 6 00mk/1 5sp, 15/06, 32, 256x192/4 NEX, NP/VB/SQ/SPF.



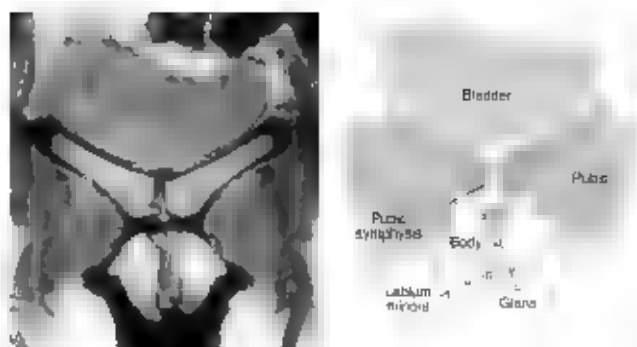
**Fig. 3.**

**A.** this axial section cephalad to image shown in figures 1 and 2 reveals divisions of pudendal neurovascular bundle (clitoral and perineal neurovascular bundles) supplying complex vascular structures of bundle and cavernous tissue are highlighted by fat saturation. Nerves are not shown by MRI but they are known from dissections to accompany vessels. **B.** another fat saturated section cephalad to clitoris highlights clitoral veins draining into pudenda neurovascular bundle attaching to pelvic side wall



**Fig. 4.**

This midline sagittal section highlights almost boomerang-like appearance of clitoral body crura and glans. MRI specifications were FSE, TR 4000, TE 1.5/Et EC 1/1 16kHz, FOV 20x20, 4.0mm/1 0sp. 30/04 16, 256x256/2 NEX, FC/1NP



**Fig. 5.**

Coronal section reveals paired clitoral corpora comprising clitoral body, located caudal to pubic symphysis. Caudal limit of body is glands. Relationship between glands and labia is seen. MRI specifications were FSE, TR 4000, TE 15/Ef EC 1/1 16kHz, FOV 16x16, 4.0mm/1.0sp, 30/04 16, 256x256/2 NEX, FC/TP



# Magnetic resonance imaging of male and female genitals during coitus and female sexual arousal

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## Abstract

**Objective** To find out whether taking images of the male and female genitals during coitus is feasible and to find out whether former and current ideas about the anatomy during sexual intercourse and during female sexual arousal are based on assumptions or on facts.

**Design** Observational study.

**Setting** University hospital in the Netherlands.

**Methods** Magnetic resonance imaging was used to study the female sexual response and the male and female genitals during coitus. Thirteen experiments were performed with eight couples and three single women.

**Results** The images obtained showed that during intercourse in the "missionary position" the penis has the shape of a boomerang and 1/3 of its length consists of the root of the penis. During female sexual arousal without intercourse the uterus was raised and the anterior vagina was lengthened. The size of the uterus did not increase during sexual arousal.

**Conclusion** Taking magnetic resonance images of the male and female genitals during coitus is feasible and contributes to understanding of anatomy.

## Introduction

"I expose to men the origin of their first, and perhaps second, reason for existing," Leonardo da Vinci (1452-1519) wrote these words above his drawing "The Copulation" in about 1493 (fig 1).<sup>1</sup> The Renaissance sketch shows a transparent view of the anatomy of sexual intercourse as envisaged by the anatomists of his time. The semen was supposed to come down from the brain through a channel which can be seen in the spine of the man. In the woman the right lactiferous duct is depicted as originating in the right female breast and ending in the genital area. Even a genius like Leonardo da Vinci distorted men's and women's bodies—as seen now—to fit the ideology of his time and to the notions of his colleagues, who he paid tribute to.

The first careful study—since the sketch by Leonardo da Vinci—of the interaction of male and female human genitals during coitus was published by Dickinson in 1933 (fig 2).<sup>2</sup> A glass test tube as big as a penis in erection inserted into the vagina of female subjects who were sexually aroused by clitoral stimulation (occasionally with a vibrator) guided him in constructing his pictorial supposition.

In the 1940s Masters and Johnson made their assessments with an artificial penis that could mechanically imitate natural coitus and by "direct observation" the introduction of a speculum and bimanual palpation.<sup>3-5</sup> Their most remarkable observations regarding sexual arousal in the woman were the backwards and upwards movements of the anterior vaginal wall (vagina, tening) and a 50-100% greater volume of the uterus. This increase disappeared 10-20



Fig 1 "The Copulation" as imagined and drawn by Leonardo da Vinci. With permission from the Royal Collection, Her Majesty Queen Elizabeth II is gratefully acknowledged.

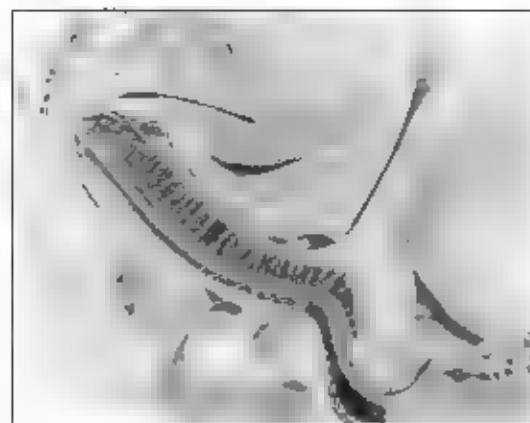


Fig 2 Mid-sagittal image of the anatomy of sexual intercourse envisaged by R. L. Dickinson and drawn by R. S. Kendall.<sup>2</sup>

minutes after orgasm. When sexual excitement without orgasm occurred, the volume returned to normal in 30-60 minutes. Masters and Johnson presumed that the greater volume of the uterus was due to engorgement with blood. However they qualified their presumption: "In view of the artificial nature of the equipment, legitimate issue may be raised with the integrity of observed reaction patterns."<sup>6</sup>

In 1992 Riley et al published an ultrasound study on copulation.<sup>1</sup> The images were of relatively poor quality as they used hand held self scanning equipment, and none of the images was overview. We used magnetic resonance imaging to study the anatomy and physiology of human sexual intercourse. Our search started in 1991 when one of us (PvA) saw a black and white slide of a midsagittal magnetic resonance image of the mouth and jaw of a professional singer who was singing "aaa." He remembered Leonardo's drawing and wondered whether it would be possible to take such an image of human coitus. We decided to do, as an ad hoc "instrument-oriented" study despite the unsensitised and other irrelevant reactions we expected and received from our quality people.

Magnetic resonance imaging had already been used as a diagnostic tool to study erectile impotence: it is particularly attractive for this kind of study because it produces images with exquisite anatomical detail that are clearer than those obtained with ultrasonography or radiography, and—as far as we know—it is safe. The aim of the study was initially to find out whether taking images of the male and female genitals during coitus is feasible, and later whether former and current ideas about the anatomy during sexual intercourse and during female sexual arousal are based on assumptions or on facts.

## Subjects and methods

The participants (pairs of men and women) were recruited by personal invitation and through a local scientific television programme. Respondents were invited to participate if they met the following criteria: older than 18 years, intact uterus and ovaries, and a small to average weight/height index. The experimental procedure was explained in a letter sent to respondents along with an informed consent form. Participants were assured confidentiality, privacy, anonymity, and the possibility of withdrawing from the study at any time. After written informed consent had been obtained, the participants were invited to come for a scan when the equipment was available on a Saturday.

The tube in which the couple would have intercourse stood at a room next to a control room where the researchers were sitting behind the scanning console and screen. An improvised curtain covered the

window between the two rooms, so the intercom was the only means of communication. Imaging was first done in a 1.5 Tesla Philips magnet system (Gyroscan S15) and later at a 1.5 Tesla magnet system from Siemens Vision. To increase the space in the tube, the table was removed, the internal diameter of the tube is then 50 cm. The participants were asked to lie with pelvises near the marked centre of the tube and not to move during imaging. After a preview 10 mm thick sagittal images were taken with a half-Fourier acquisition single shot turbo SE T2 weighted pulse sequence (HASTE). The echo time was 64 ms, with a repetition time of 4.4 ms. With this fast acquisition technique, 11 slices of relatively good quality were obtained within 14 seconds.

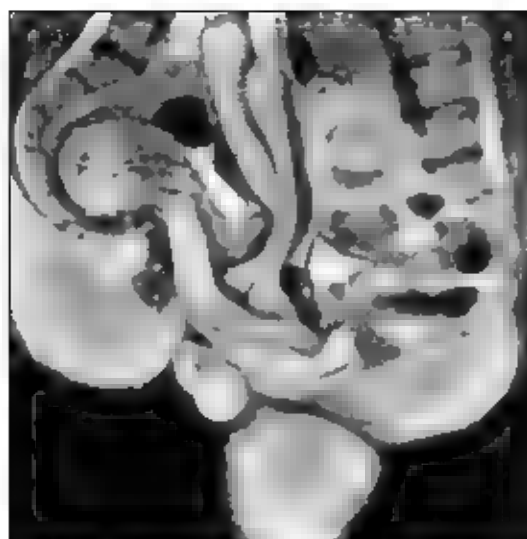
The volunteers were shown the equipment in the two rooms, and personal and gynaecological histories were taken. The experimental procedure was explained, and all investigators left the imaging room. After a preliminary image for positioning the true pelvis of the woman was taken, the first image was taken with her lying on her back (image 1). Then the male was asked to climb into the tube and begin face to face coitus in the superior position (image 2). After this shot—successful or not—the man was asked to leave the tube and the woman was asked to simulate her clitoris manually and to inform the researchers by intercom when she had reached the preorgasmic stage. Then she stopped the auto-stimulation for a third image (image 3). After the image was taken the woman restarted the stimulation to achieve an orgasm. Twenty minutes after the orgasm the fourth image was taken (image 4). At the end of the experiment the images were evaluated in the presence of the participants.

## Results

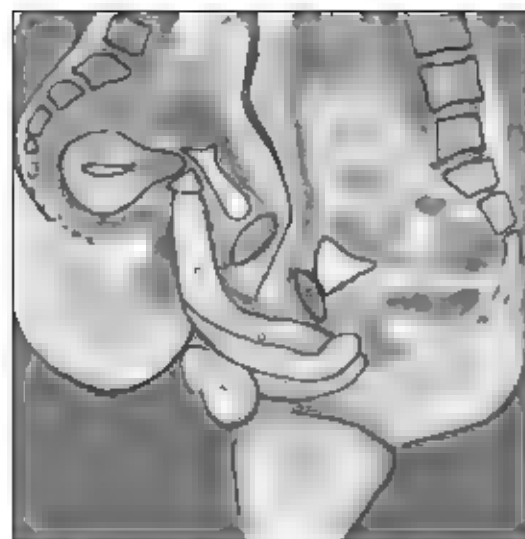
Thirteen experiments were performed with eight couples (three couples performed two experiments each) and three single women. The table shows age, weight, height index, parity, type of contraception, female orgasm (yes/no), and the depth of penetration (partial or complete). No women reported having a "g-spot" or producing female ejaculation during orgasm. On two Saturdays in 1991 (experiments 1 and 2) the first couple succeeded with complete penetration that lasted sufficiently long for the images to be taken. The

Magnetic resonance imaging during coitus (8 couples) and sexual arousal (11 women)

| Experiment | Age (man/woman) | Weight/height (mean) (woman) | No of children | Contraception | Female orgasm | Penetration     | Details                                       |
|------------|-----------------|------------------------------|----------------|---------------|---------------|-----------------|---|
| 1          | 41/40           | 0.33/0.39                    | 0              | Vasectomy     | No            | Complete        | Movement artefact 1991                        |
| 2          | 43/42           | 0.33/0.39                    | 1              | Vasectomy     | No            | Complete        | Movement artefact 1991                        |
| 3          | 21/20           | 0.31/0.30                    | 0              | Oral          | No            | Partial         | Movement artefact 1996                        |
| 4          | 33              | 0.35                         | 0              | Oral          | Yes           | No              | No partner                                    |
| 5          | 40              | 0.40                         | 3              | No            | Yes           | No              | No partner                                    |
| 6          | 35              | 0.3                          | 0              | Oral          | Yes           | No              | No partner                                    |
| 7          | 20/21           | 0.32/0.30                    | 0              | Oral          | Yes           | Partial         | No  |
| 8          | 23/2            | 0.38/0.34                    | 0              | Oral          | Yes           | Partial         | No  |
| 9          | 26/27           | 0.35/0.30                    | 0              | No            | Yes           | Nearly complete | No  |
| 10         | 24/21           | 0.38/0.40                    | 0              | Oral          | Yes           | Nearly complete | Uterus in retroversion                        |
| 11         | 26/26           | 0.35/0.33                    | 0              | Oral          | Yes           | Nearly complete | No  |
| 12         | 25/22           | 0.39/0.40                    | 0              | Oral          | No            | Complete        | Sildenafil 25 mg, uterus in retroversion 1998 |
| 13         | 28/28           | 0.35/0.39                    | 0              | Oral          | No            | Complete        | Sildenafil 25 mg                              |



**Fig 3** Midsagittal image of the anatomy of sexual intercourse (experiment 2). P=penis, Jr=urethra, Pe=perineum, U=uterus, S=symphysis, B=bladder, I=ileocecal, L5=lumbar 5, Sc=scrotum



**Fig 4** Midsagittal images of sexual response in a multiparous woman (experiment 9): (left) at rest; (centre) pre-orgasmic phase; (right) 20 minutes after orgasm

Philips 1.5 Tesla magnet system at that time required a relatively long acquisition time (52 seconds) and had a relatively poor signal/noise ratio. This gave low quality images with many movement artefacts. In 1996 the Siemens Vision 1.5 Tesla magnet system became available and provided the opportunity to continue our search for sharp images. Six couples succeeded in partial, though not complete penetration (experiments 3 and 7-11). In 1998 sildenafil (Viagra) became available in the Netherlands. The two couples in experiments 9 and 11 were invited to repeat the procedure one hour after the man had taken one 25 mg tablet of sildenafil. They succeeded with complete penetration that lasted long enough (12 seconds) for sharp images to be taken (experiments 12 and 13).

Figure 3 shows a midsagittal image of the anatomy of sexual intercourse with the woman lying on her back and the man on top of her. The root of the penis (1/3 of the length) and the erect pendulous body (2/3 of the length) are visible. The pendulous part of the erect penis moved upwards at an angle of about  $120^\circ$  to the root of the penis, and almost parallel to the woman's spine. In all the experiments this phenomenon occurred in this coital position and was not related to the depth of penetration. In complete penetration the penis filled up the anterior fornix (experiments 1, 2 and 13) or the

posterior fornix (experiment 12, fig 3). During intromission the pubic bones of the men and the women did not approach each other closely: the female pubic bone stayed about 4 cm cranial to that of the male. The uterus was raised by 2.4 cm. The changed configuration of the bladder was caused by penile stretching of the anterior vaginal wall during intromission, plus the raising of the uterus and the increase in bladder size as it filled. The subjective level of sexual arousal of the participants, men and women, during the experiment was described afterwards as average.

Eight women had a complete sexual response during sexual stimulation (experiments 4-11) and these women described their orgasm as "superficial." The sexual response of one of these women is shown in figs 4. In the pre-orgasmic phase the anterior vaginal wall lengthened by 1 cm and the uterus rose within the pelvis. This is a typical response in all experiments except one (experiment 10). During sexual arousal without coitus, the position and size of the uterus hardly changed. It was not possible on these magnetic resonance images to distinguish between the vaginal wall, the urethra, and the clitoris. These images did not show widening of the vaginal canal, structures suggesting a Gräfenberg spot, or a separate reservoir of fluid indicating "female ejaculation."

## Discussion

In *Sex and the Human Female Reproductive Tract* Levin stated: "The scientific study of the interaction of human genitals during coitus and after ejaculation with and without female orgasm has always been difficult and controversial with ethical, technical and social problems."<sup>1</sup> We experienced this personally. It took years, a lobby, undesired publicity, and a godsend (two tablets of sildenafil 25 mg) to obtain our images. They show that such pictures are feasible and add to our knowledge of anatomy.<sup>2</sup>

We did not foresee that the men would have more problems with sexual performance (maintaining their erection) than the women in the scanner. At the women had a complete sexual response, but they described their orgasm as superficial. Only the first couple was able to perform coitus adequately without sildenafil (experiments 1 and 2). The reason might be that they were the only participants in the real sense involved in the research right from the beginning, because of their scientific curiosity, knowledge of the body, and artistic commitment. And as amateur street acrobats they are trained and used to performing under stress.

### Anatomy revealed

The hypothesised anatomy of human coitus, as drawn by Leonardo da Vinci in about 1493 and by Dickinson in 1933, could be tested with magnetic resonance imaging. According to our images, the caudal position of the male pelvis during intercourse, the potential size of the bulb of the corpus spongiosum, and the capacity of the penis in erection to make an angle of around 120° to the root of the penis, enabled penetration along the bottom of the symphysis up to the woman's promontorium (fig 3) or to the middle part of the sacrum (fig 4) almost parallel to her spine. The "hidden" position of the root of the penis must have been the reason for the difference between the angle of penetration as envisaged by Dickinson and the penetration angle in our images. The images showed that during "missionary position" intercourse the penis is not straight, as drawn by Leonardo. It has the shape of a boomerang and not of an S as envisaged by Dickinson. Leonardo and Dickinson clearly underestimated the size of the root of the penis. Scanning of the position of the human genitals during coitus gives a convincing impression of the enormous size of the average penis in erection (root plus penile part is 72 cm, and of the volume of vagina and pelvic space required by the penile part of the penis).

Contemporary scientific knowledge about internal genital changes during female sexual arousal relates mainly to the vagina (thickening of the vaginal wall due to vasodilation, lubrication, widening of the vaginal cavity), the urethra (possible engorgement of the vascular tissue of the urethra), and the uterus (upwards movement of the uterus = tensing effect + change in position of the uterus + change in size of the uterus). Recent research on the anatomical relation between urethra and clitoris showed that the perineal urethra is embedded in the anterior vaginal wall and is surrounded by erectile tissue in all directions except posteriorly where it relates to the vaginal wall.<sup>3</sup> The bulbs of the vestibule directly relate to the outer clitoris

components and the urethra. Details of the vaginal wall, the urethra, and the bulbs of the vestibule were unfortunately beyond the resolution of our current equipment. However, we were able to see displacement of the uterus (upwards) and lengthening of the anterior vaginal wall and hardly any change in the position of the uterus during sexual arousal, unless it was caused by intromission of the penis.

In contrast to the findings of Masters and Johnson, our images did not show an increase in the size of the uterus during sexual arousal. These observations are not surprising. From an anatomical and physiological point of view there is no basis for a 50-100% increase in the volume of the uterus in such a short time. Masters and Johnson made their observations with manual palpation. Their interpretation may have been caused by the raising of the uterus or filling of the bladder during their experiments.

### Changes during sexual arousal

Magnetic resonance imaging showed strikingly that during female sexual arousal, changes occurred in the anterior vaginal wall. These changes took place in the vaginal wall itself (the engorgement as such is not visible on the images), through the raising of the uterus, displacement of the uterus caused by penetration of the penis, and through gradual filling of the bladder. Histological studies<sup>4-6</sup> and immunohistochemistry<sup>7</sup> have shown that the anterior wall of the vagina has denser innervation than the posterior wall. This is supported by clinical studies<sup>4, 10</sup> and research into vaginal sensitivity to electric stimuli<sup>11</sup> in which the anterior vaginal wall—with the urethra behind it—was found to be relatively sensitive. Hoch's concept of a clitoral-vaginal sensory arm of the orgasmic reflex refers specifically to the anterior vaginal wall and the deeper tissues—the urinary bladder, the periurethral tissues, and Halban's fascia<sup>12</sup>—and our images support this.

### Conclusion

What started as artistic and scientific curiosity has now been realised. We have shown that magnetic resonance images of the female sexual response and the male and female genitals during coitus are feasible and beautiful; that the penis during intercourse in the "missionary position" has the shape of a boomerang and not of an S as drawn by Dickinson; and that, in contrast to the findings of Masters and Johnson, there was no evidence of an increase in the volume of the uterus during sexual arousal.

The Polish-German physician and philosopher Ludwik Fleck (1896-1961) used images of female genital anatomy to illustrate the cultural conditioning of scientific knowledge. In his treatise *Genesis and Development of a Scientific Fact* he states: "In science, just as in art and in life, only what is true to culture is true to nature."<sup>13</sup> Magnetic resonance images, objective as they are, show the anatomy of human coitus and the female sexual response that is true to nature.

We thank our volunteers for their cooperation, ladies and gentlemen, to publish intimate MR images of them, those hospital officials on duty who had the intellectual courage to allow us to continue this search despite obstructive and stifling press bounds, Professor J. Kremer for his encouragement to use the scanner to study female sexuality and for his critical reading

## What is already known on this topic

It has been extremely difficult to investigate anatomical changes during the act of coitus and the female sexual response

Modern magnetic resonance imaging allows exploration of aspects of living anatomy

## What this paper adds

Taking MR images of the male and female genitals during coitus is feasible

During missionary position intercourse the penis has the shape of a boomerang

During female sexual arousal without intercourse the uterus rises and the anterior vaginal wall lengthens

The size of the uterus does not increase during sexual arousal

the typescript, and Professor W Maib for offering the use of equipment, at the University Hospital Utrecht. P van Andel does not want to be acknowledged for his idea of using MRI to study coitus. He excuses himself by quoting the French romantic poet Alphonse de Lamartine (1790-1869): "C'est singulier. Moi, je pense jamais, mes idées pensent pour moi."

**Contributors** WTS initiated and coordinated the formulation of the study hypothesis, designed the protocol and participated in data collection, interpretation of the findings, and writing of the paper; he is guarantor of the study. PVA had the original idea for the present study, and participated in formulation of the study hypothesis, data collection, interpretation of the findings, and writing of the paper. IS, together with her partner, participated in the first two experiments and helped design the

protocol. EM participated in the execution of the study, particularly data collection and interpretation of the magnetic resonance findings.

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**Competing interests** None declared.

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## Shaken, not stirred: bioanalytical study of the antioxidant activities of martinis

C C Trevithick, M M Chartrand, J Wahlman, F Rahman, M Hirst, J R Trevithick

### Abstract

**Background** Moderate consumption of alcoholic drinks seems to reduce the risks of developing cardiovascular disease, stroke and cataracts, perhaps through antioxidant actions of their alcohol, flavonoid, or polyphenol contents. "Shaken, not stirred" routinely identifies the way the famous secret agent James Bond requires his martinis.

**Objectives** As Mr Bond is not afflicted by cataracts or cardiovascular disease, an investigation was conducted to determine whether the mode of preparing martinis has an influence on their antioxidant capacity.

**Design** Shaken and shaken martinis were assayed for their ability to quench luminescence by a luminescent procedure in which hydrogen peroxide reacts with luminol bound to albumin. Student's *t* test was used for statistical analysis.

**Results** Shaken martinis were more effective in deactivating hydrogen peroxide than the stirred variety, and both were more effective than gin or

vermouth alone (0.072% of peroxide control for shaken martini, 0.157% for stirred, 1.54.3% for gin and 1.90% for vermouth). The reason for this is not clear but it may well not involve the facile oxidation of reactive martini components: control martinis through which either oxygen or nitrogen was bubbled did not differ in their ability to deactivate hydrogen peroxide (0.061%  $\pm$  0.057%) and did not differ from the shaken martini. Moreover preliminary experiments indicate that martinis are less well endowed with polyphenols than Sauvignon white wine or Scotch whisky (0.056 mmol/l catechin equivalents) shaken, 0.050 mmol/l stirred, 0.592 mmol/l wine, 0.575 mmol/l whisky).

**Conclusions** 007's profound state of health may be due, at least in part, to compliant bartenders.

### Introduction

James Bond, the well known fictional secret agent ("007") of the British intelligence services, not only is

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# The Grimoire of the Nymphos

## Servitors/Thoughtforms for Sexual Pleasure

### By Frater CyberLord

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"In magick to have said is to have done, to affirm and will what ought to be, is to create."  
– Eliphas Levi

"You can attract only that which you mentally become and feel yourself to be in reality."  
– Ernest Holmes

## Introduction

In the practice of magick, the act of thinking about something brings it into existence. Though it may not manifest physically, it exists in the astral or mental realm. All things originate from the Void—Form or Order emerging from Chaos. Ideas that are not given form return to the Void, or the "Drawing Board" (akin to the Tracing Board in Freemasonry).

This book focuses on creating a specific type of servitor known as a *nympho*, designed exclusively for sexual pleasure. Through the use of psycho-sexual energy, the practitioner will create a concentrated thoughtform with a singular purpose: to provide sexual pleasure. These nymphos exist solely to fulfill your sexual fantasies, acting as "sex machines" in the astral realm.

It's important to distinguish nymphos from incubus/succubus entities. While the latter are spirits known to drain energy from their victims through sexual contact, nymphos do the opposite. Incubus/succubus entities can be dangerous, often becoming jealous and possessive. In contrast, nymphos are safe and exist solely to serve the pleasure of their creator. They embody the carefree "Free Sex, Free Love" ethos of the 1960s hippy culture, offering erotic fun without the risks of STDs, pregnancies, jealousy, or other serious consequences.

As a heterosexual male, I focus on heterosexual female nymphos, but the methods described here can be adapted to any sexual preference, gender, or lifestyle. These servitors are your entities, created to serve your desires. If you share or trade these entities with others, they transform into egregores, collective entities formed by the energies of multiple individuals.

### Thoughtforms

A thoughtform is a structured, concentrated inter-dimensional energy form intentionally created to perform specific tasks as programmed by the practitioner. Created through focused thoughts and visualization, a thoughtform operates within the astral or mental realms, yet can influence the material world.



Some believe that angels, demons, gods, or other spirits are psychological constructs—ways to communicate with different parts of our super-conscious mind or subconscious mind. Others see all spirits as thoughtforms, given form by human creativity.

In Tibet, such entities are known as *tulpas*. In Western magic, they are often referred to as *Artificial Elementals*, created by the practitioner using the natural archetypal elements of Earth, Air, Fire, and Water.

“In contrast to thoughts living in their forms in the mental or spiritual sphere, the ‘elementals’ are entities with a certain degree of intelligence deliberately created by a magician. Such elementals are capable of fulfilling certain tasks on the mental plane. The genuine magician will always be inspired by good and noble intentions and keep the altruistic motive in mind if he is aiming at the highest level of magical maturity.”

– *Initiation into Hermetics* by Franz Bardon

## The Five Classes of Thoughtforms

- **Sigil** – A magically charged intention that the practitioner sends out to impose their will upon the Universe. It is the most basic unit of magic, often encoded as a glyph, mantra, magical knotwork, tattoo, etc. It is a complex thought distilled into a form of empowerment and release.
- **Servitor** – A semi-autonomous thoughtform capable of performing complex and repetitive tasks. Servitors are interactive spells that persist longer and can perform work on behalf of the practitioner. A servitor is created to perform specific functions or duties, existing solely to serve without independent will or sentience.

“The general explanation of what a Servitor is that it is a concentrated thoughtform created to perform certain tasks. Tibetan monks were incredibly adept at creating these. She [Madame Alexandra David-Née.] also writes how she was able to create one of these Tulpas herself after many months of effort.”

– From *How to Create a Servitor to do Your Bidding* by John Kreiter

- **Egregore** – A fully autonomous being, such as an angel, demon, or other spirit. Egregores are collective entities, often created unknowingly by groups of people who contribute their energies to a shared idea. Egregores can grow in power, adapt, and evolve as more people invest belief in them.
- **Godform** – An autonomous and self-perpetuating entity (a God) that no longer depends on external power for its continued existence. Unlike other thoughtforms, a Godform is worshiped and served by practitioners.

- **Tulpa** – A type of low-level egregore that behaves like a servitor. Created by placing a fragment of one's personality within a container, tulpas are ready-made servitors with basic capabilities. However, they carry the risk of becoming autonomous and potentially harmful to their creator.

## Creation, Launching, and Maintenance

### Construction:

#### Construction:

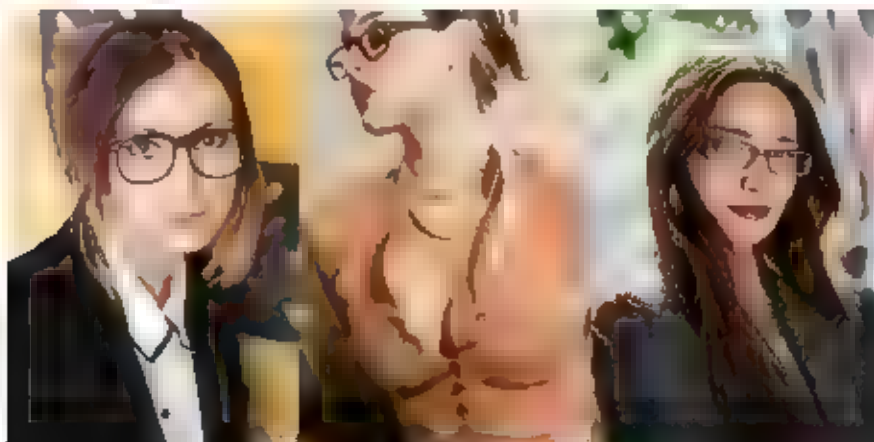
The purpose of the servitor should be clearly defined, whether it is to aid in abundance/prosperity/wealth, romance/sex, or personal development (e.g., increasing confidence, charisma).

Consider offering the servitor the option of autonomy once it has completed its tasks. Establish an energy source (e.g., starlight) and link it to a natural element or location (such as parkland or woods) to symbolize growth, fertility, and wealth. Additionally, a 'Kill Switch' or method to deactivate or destroy the servitor should be implemented in case it becomes uncontrollable.

#### Appearance:

The servitor should take a form that aligns with its purpose. For example, a servitor for business success and sensuality could appear as a sophisticated, attractive woman with a professional yet alluring demeanor. Maybe an attractive librarian or teacher perhaps?

These pics should be a general idea of what we should aim for:



If these photos are considered offensive or too racy, I am open to suggestions, but I am adamant that the entity should look like a human female whose appearance embodies sensuality and intelligence. If there is anyone with strong artistic skills that can do better, please feel free to contribute!

**PSA ("Public Service Announcement")/Warning:**

Avoid incorporating any personal or political figures into the servitor's design, as this could lead to unintended consequences

**Naming and Sigil:**

The servitor should have a unique name and a sigil or logo that represents its purpose and identity. This sigil can be used to summon and interact with the servitor.

**Statement of Intent:**

A clear and concise statement of the servitor's purpose should be established. This can include goals such as attracting wealth, fostering romantic connections, or boosting confidence and charisma.

**For example:**

To help us acquire and maintain abundance/prosperity/wealth, find ideal partners for romance, sex, life and foster positive self-improvement (increasing confidence, charisma, self-esteem etc.).

**Special Powers and Capabilities:**

The servitor should be endowed with specific powers and capabilities that align with its purpose. For example, a servitor designed for financial success might be able to find and open opportunities for wealth creation.

**A paragraph or a point by point description of what we want our servitor to do:**

- Clear and open the paths in our life so that abundance can flow in our life
- Find opportunities suited to our talents, abilities, and knowledge that allow us to acquire wealth.
- Help find the resources and tools to manage our finances, pay our debts and improve our credit score
- Excite love and passion in the heart of our ideal partner
- Help us acquire the confidence and "sexual magnetism" for attraction.
- Attract partners for a safe and happy sex life
- Help us acquire and maintain charisma, charm, and positive self-esteem in general.

**A personal drawing/image of our servitor which should be as complex as you can make it:**

See above pics.

A point by point description of our servitor special powers or capabilities which should be apparent in our drawing/photos (don't worry about trying to make it perfect, you just want a good description of the creature that you are trying to create).

See above pics.

Beatrice appears in the form a young woman in business attire. She may be wearing glasses. A long, tight, silk dress, a blouse and skirt or pants or a polo shirt and khakis (Think the staff uniform at Best Buy or Walmart). She is 5'10", she has dark brown hair with highlights, usually in a ponytail or a bun, brown eyes, and tanned skin. Her ethnicity/race is left ambiguous. She is an intelligent personal assistant. She is able to access the subconscious desires of the person who calls her to create an appropriate image to manifest in, though, and would, therefore, be different for each person.

To describe the type of energy, mannerisms, and personality that she embodies, the following characters from popular culture have been revealed to me

C.J. Cregg from "The West Wing" for *professionalism*

Chloe O'Brian from "24" for *vulnerability, quirky disposition and loyalty*

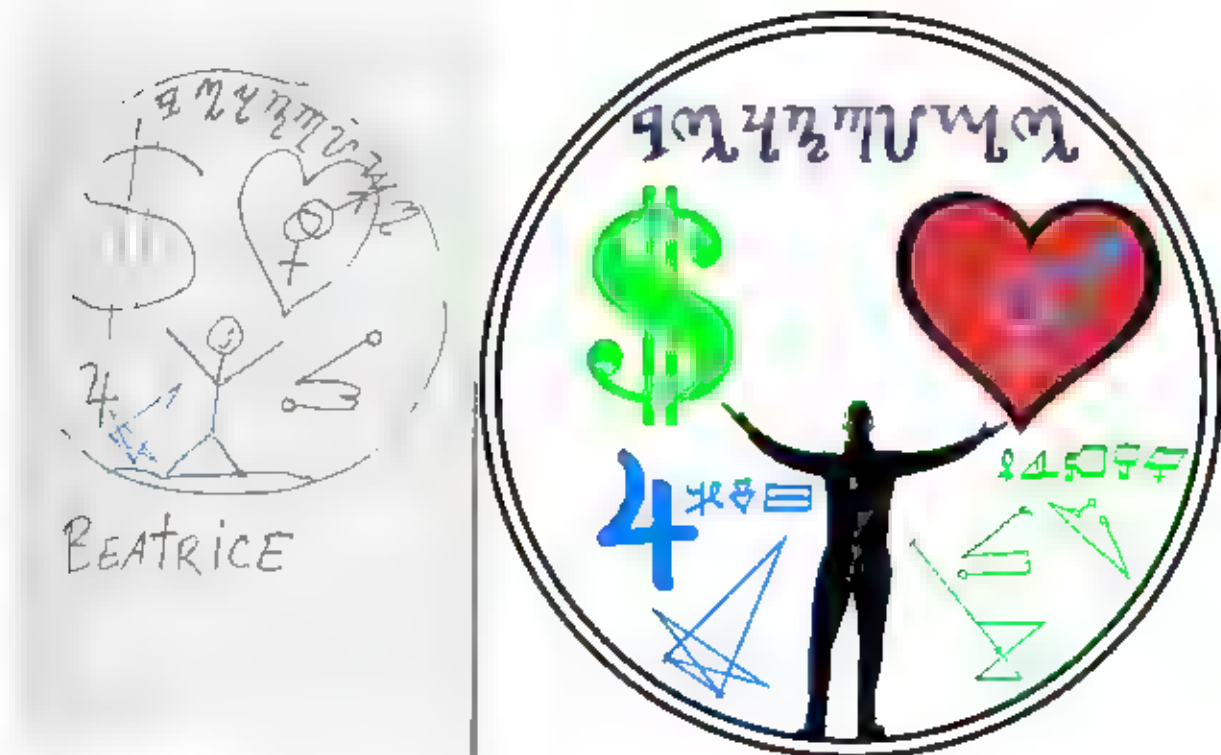
Abby Sciuto from "NCIS" for *expertise, fun, but slightly dark attitude, empathy, and compassion*

Rachel Tyrell from "Blade Runner" for *classic beauty, logic, and emotional innocence*

On the NBC network show "The Good Place", there is an actual servitor named Janet, "a celestial, programmed guide who acts as the main source of information, analogous to an intelligent personal assistant. She has infinite knowledge of the universe, can provide residents anything they desire, and details everything of what is happening in the Good Place but does have some flaws in trying to act more human."

I hope this helps.

**A simplified version of the descriptive picture that you have made, this is a symbol or 'logo/sigil' of our servitor:**



The dollar sign represents money. The heart with the planetary symbols for Venus and Mars intertwined represent love, romance, and sex. The silhouetted figure with the arms outstretched represents confidence and vigor. "Beatrice" is written along the top in the Theban script. The blue planetary symbol for Jupiter is for finance and abundance. There is a green Venus logo, sigil of Hagiel for love and romance. There are two kamea (number squares) logo, sigils based on "Beatrice". The blue one is the Jupiter Logo/sigil and the green one is the Venus Logo/sigil.

I am aware that this resembles a talisman. My artistic skills are not very good. If there is anyone with strong artistic skills that can do better, please feel free to contribute! If another logo, sigil has been revealed to you in your evocations/invocations and/or dreams, please share it! Entities can have more than one logo/sigil.

**The name of our servitor at the bottom:**

Beatrice

## Charging:

To bring the servitor to life, it must be charged with thought force—concentrated personal attention. This can be done through meditation, visualization, and repetition of the servitor's name. The servitor's sigil should be used as a focal point during this process.

Imagine the servitor in a dormant state, gradually awakening as you breathe life into it. Repeat the servitor's name (e.g., "Beatrice") three times, visualizing the servitor opening its eyes and coming to life.

This process should be repeated multiple times over several days to fully activate the servitor. The more attention and energy you invest in the charging process, the stronger and more effective the servitor will become.

## Casting:

The final part of using our servitor is to give it its instructions in a concise way and send it out to do your bidding.

The best way to do this is to first charge our servitor until you have a good sense, a strong belief, that it is indeed alive before you (perhaps floating above its logo, sigil, and name on that paper). Then once you are confident that it is there, call its name, give it its instruction, and send it on its way. You might say something like, "Beatrice go out and help me with my finances! GO!" And then point in the direction you want it to go.

Think of your servitor sort of like a pet that you have created or perhaps a computer program that you have created in order to do your bidding. Be strong and commanding in your tone whenever you address it and always remember that it works for you and not the other way around. If you ever see it flitting around not acting in a way that you wanted to, order it to get back to work or tell it to make itself scarce until you need it.

Whether a psychological exercise or a truly alive astral being and thought form, your servitor will be able to accomplish amazing things if it is created correctly. Be creative in your creation and how you wish to accomplish your desires, this is a truly wonderful way to deal with some of the problems that you might have in your life and the sky's the limit as to what your servitor can do.

I modified the [XaTuring Facebook Working](#) October 2013 for

## A General Conjunction of Beatrice:

Look at either logo/sigil posted above and invoke/evoke Beatrice

Envision yourself in a vast library filled with shelves of books or a large data center filled with servers and terminals or cascading symbols and numbers like in the 'Matrix' movie. This is the infamous Akashic Records or Hall of Records on the astral realm.

While still looking at the logo/sigil, envision the Internet as a further extension of this network. Your computer/smartphone/tablet etc. are your interfaces, extending aspects of yourself into the network. You are part virtual, and on the network, you exist in non-linear time.

You see a young woman, professionally dressed sitting at an Information Desk/Kiosk. She turns to you, smiles and asks, "How may I be of assistance?" or "May I help you with something?"

Invoke Beatrice

**"Beatrice, my Librarian, and Assistant of Infinite Knowledge, please help me and accept my plea. My name is (your magical or birth name). I ask of you to hear my will! Accept my desires, please bring me luck and good fortune. Enrich my life with riches and prosperity. Send into my life love (or the love of 'person's name'). Enrich my heart with love and passion. By my bidding may it be so. By your power, it will be done. So mote it be!"**

She will reply, "As you wish." Picture her making gestures on a holographic screen that appears in front of her (like the scene in 'Minority Report'). See the vivid 3-D images and cascading numbers and symbols on it as it and she descends back into the depths of the network where all things are connected. Let it fade into the darkness that is the primordial Void of great potential. (Fade to black.) Let it go and think no more of it.

Say: **"So it is done!"** and go about your day, focusing on other tasks.

When your requests have been granted, show gratitude to her. **"I thank you, Beatrice, for coming to me. I welcome you into my life and into my dreams. Go now and be ready to come when I call you. May there be peace between you and I. So mote it be."**

## Final Words:



This is your experiment. This is your grimoire. Add to it. Rewrite it. Let there be multiple versions of it! Spread like a meme. Give Beatrice the same life that Pepe and Kek have. This is your servitor. Use her wisely. Use her for positive intent to change the world. To help the evolution of humanity towards our true destiny, to become Gods! Let Beatrice and others like her to help us with the mundane issues of finance, love, sexual fulfillment and a positive self-image. Things that are holding us back from our true power.

If the hope is that future generations of humanity will finally be able to travel among the stars, "To see our new life and new civilizations, to go where no one has gone before" as on "Star Trek" then we as a species need to find a way to get off this planet and out of this solar system. I hope that magical servitors like Beatrice can help us out.

Or, we as humanity are so royally fucked indeed.

## Summary:

### Introduction.

The grimoire explains the creation and use of a specific type of servitor, called a "nympho," designed to provide sexual pleasure. It differentiates nymphos from other entities like incubi and succubi, emphasizing that nymphos are safe, non-possessive, and solely exist to serve the creator's desires without any negative consequences.

### Core Concepts.

- **Thoughtforms.** Entities created through focused mental and psychic energy. These entities can range from simple thoughtforms to complex egregores and godforms.
- **Servitors.** Semi-autonomous thoughtforms that perform specific tasks. Nymphos are a type of servitor focused on sexual pleasure.

### Creation Process.

- The process of creating a nympho involves concentrated thought, visualization, and psycho-sexual energy. The creator designs the nympho's appearance, personality, and abilities.
- The grimoire suggests that nymphos can take on various forms, often appearing as an attractive human female embodying sensuality and intelligence.

### Types of Thoughtforms

- 1 **Sigil.** A simple, charged intention that acts like a spell.
- 2 **Servitor.** A more complex entity that performs tasks for its creator.
- 3 **Egregore.** A fully autonomous entity created by the collective energy of multiple individuals.
- 4 **Godform.** A self-sustaining entity that no longer relies on external power for existence.
- 5 **Tulpa.** A thoughtform similar to a servitor but with a portion of the creator's personality embedded within it.

**Ethics and Guidelines**

- Nymphos are designed for safe and consensual sexual experiences. The grimoire emphasizes the importance of responsibility, noting that these entities should not be shared or traded without careful consideration.
- The creator should also consider adding a "kill switch" to deactivate the servitor if it becomes uncontrollable.

**Rituals.**

- The grimoire outlines rituals for charging and activating the servitor. This involves focused meditation, visualization, and the repetition of the servitor's name.

**Additional Notes.**

- The grimoire advises against incorporating real-world figures or controversial personalities into the creation of a servitor.
- It also includes examples of potential servitor designs and sigils, encouraging creators to tailor their nymphos to their personal preferences.

In the names of  
ELL, ELL-OH-HEEM, AH-DOH-NIGH,  
EH-YEH ASHER EH-YEH,  
ELL SHAD-EYE, ELL-EE-ON, and EE-AH-OH-EH  
SHAHM-AH  
and by the power of Lucifer,  
I call on thee, BOON  
AS-MOW-DAY-US

Oh, spirit \_\_\_\_\_  
I hereby license you to depart to your  
proper place,  
quietly and with the peace of  
EE-AH-OH-EH between you and me. AH-MEN.

## Magical Seduction Ritual Modifications

Ani EE-AH-OH-EH ADD-OH-NIGH

Rebono Shel Le Olam Amen

EH-HE-YEAH, EE-AH-OH-EH ELL-OH-HEEM,  
EE-AH-OH-EH ELL-OH-AH VAH-DAH-ART,  
SHAD-EYE-ELK-EYE, ADD-OH-NIGH-HA-AH-RETZ

\* Kosu Harim Silah Va Anateha Arzale  
(KOH-SUE HAH-REE-EEM TZIL-AH VAH-ANNA-TEHA  
Invoke Archangels Raziel and Haniel ARE-ZELL

(RAH-ZEE-ELL, HAH-KNEE-ELL  
Invoke the Genii (Djinn) Spirits (Sisera (SEES-AIR-AH)  
genius of desire, and Jazar (JAZZ-ARE), genius who compels  
love

Include the Venus Pentacles (2nd, 4th and 5th  
Pentacles - each must have the 1st pentacle  
drawn on the inverse side and use green ink  
for max effect), consecrate the pentacles on  
Friday using the Activation Psalms, and  
Solomonic Invocation and incense (myrrh,  
frankincense, palo santo, or copal)

I seal this command with the word of power,  
AH-RAH-REE-TAH.

Lust Oil, by the power of Asmodeus, I  
activate you in order to attract a lover.  
So shall it be. So it is done. Thank you, Thank you,  
Thank You.

Belphegor

Azazel

Mammon

Beelzebub

Asmodeus

Leviathan

Lucifer



1 Banishing x4 (Each direction)

2 Kabbalistic Cross

3 The Opening Ritual / parting the Veil

4 The Core Ritual

5 Chant to Summon all Magical Powers x3 or x9

7 Burn check and petition

8 Thanks and License to Depart

I seal this command with the word of power:

~~AH-RAH-REE-TAH~~

As you spirits have come in peace, return to your places harming none. Go in peace. Come again when you are called. It is done.

Banishing x4

Kabbalistic Cross, Stomp x3, Clap x3

## II The Cure Ritual

In the Names of ELL, ELL-OH-HEEM,  
AH-DOH-NIGH, EH-YEH ASHER EH-YEH,  
ELL SHAD-EYE, ELL-EE-ON, and  
EE-AH-OH-EH SHAHM-AH and by the Power  
of (Name), I call on thee, (Name).

I seal this command with the word of power  
AH-RAH-REE-TAH

## I The Opening Ritual

Before me, Uriel  
At my back, Raphael  
On my right, Michael  
On my left, Gabriel  
From above, Metatron

Ehyeh Asher Ehyeh  
I am that I am  
I will be what I will be.

The scent of a burning rose,  
Leaves crushed in my fingers  
The blue of twilight,  
The taste of blood,  
Gravel crackles underfoot,

~~Iron~~  
Iron into sparks,  
Ice into air,  
Flame into smoke,  
Breath into rain.

Atah Gibor L-Olam Adonai

Parting the Veil

This is the beginning, I open the way,  
I call on the inner world to know that  
this is my will.

NAH-KAH EE-AHOH-EH x3

I call on thee, Arzel (ARE-ZELL\*) in the  
East to connect me to the secret angels of universe.

KOH-SUE HAH-REE-EEM TZIL-AH VAH-ANNA-ETH  
ARE-ZELL

ARE-ZELL\* x3

ARZ-ALE\* x3

ARE-ZAY-ELL\* x3

I call on thee, Raziel (RAH-ZEE-ELL\*)  
in the East to me heard by the secret angels  
of the universe.

RAH-ZEE-ELL\* x3

VAH-HAH DEH-REH-CHAH

TZ-LAH

REH-CHAB

AL-DEH-BAR-EH-MET

VAY-AHN-VAH-TZAY-DECK

VAY-TORE-AY-CHAR

NAH-RAH-AUGHT

YEH-ME-NAY-CHAH

## Wednesday Jinn Ritual

"Oh great King of the Jinn Bargan Abu al-Adja'ib (Bargan-Aboo-Ab-ja-yib), I ask and demand of you that you send one of your elect to give me the guidance I need. Give me the same attention you have given King Solomon. So may it be."

Pass your jewelry through the incense as you look into the mirror.

"By the power of Bar-can-Aboo-Ab-ja-yib I bind you to me."

Look into the mirror and see if you can see an image of the Jinn that is assigned to you.

If you can't see it, ask for its name.

If you do not hear a name, simply refer to it as Jinn.

"You are bound by me, by this jewelry to provide me the insight I so desire and need."

Extinguish the candles and incense.

Carry the jewelry wherever you go until you feel you have gained the insight you needed.

Jinn King Barcan - Aboo - Ab - ja - yib

Planet: Mercury Day: Wednesday

Angel:

Attributes:

Invocation:

AJIB YAA BURQOON BIHAQQI  
HATSIN (2X)

MARTSIN (2X)

AYUULATSIN (2X)

AYUULAHIN (2X)

HALYUUTSIN (2X)

YAAHIN (2X)

HAYUUTSIN (2X)

THOLTHOYUUTSIN (2X)

HASYAALUUSYIN (2X)

HAYAATSIN (2X)

Jinn King Barcan - Abou Ab-ja-yib (cont.)  
KHOLAQOLLAAHUL LAYLA WAN NAHAARO  
IYILUNAHYAN SYAROOHIYAN ADUUNAAY  
ASHBAA-UUT AALI SYADAAY TAWAKKALU  
YAA BURQOON BI BIHAQQIL MALIKIL  
MUWAKKALI 'ALAIKA MIKAA-IIL  
ALLADZII TASARRO-A FII KHIDMATIHI  
WA IJAABATIHI ALUULHAN (2X)

AL-AJAL (2X)

AS-SAA'AH (2X)



## Thursday Jinn Ritual

"Oh great king of the Jinn Shamhurish (Sham-Who-rish) I ask and demand of you that you send one of your swiftness supplicants to help with my financial issue, Help me as you have helped the great King Solomon."

Pass your jewelry through the incense as you look into the mirror.

"By the power of Sham-Who-rish I bind you to this stone."

Look into the mirror and see if there is an image of the Jinn assigned to you.

If you can't see it, ask for its name.

If you do not hear a name, simply refer to it as Jinn.

"You are bound by me, by this jewelry to provide me the insight or the means to help in my financial issue."

Extinguish the candles and incense.

Carry the jewelry <sup>wherever</sup> ~~everywhere~~ you go until you feel you are satisfied with your results.

Jinn King Sham-Who-rish

Planet: Jupiter Day: Thursday

Angel: Sarfya'il

Protection, justice, abundance

Invocation:

AJIB YAA SYAMHUURASY BIHAQQIL  
MALIKIL MUWAKKILI ALLADZI  
TASAPRO-A FII KHAIDMATIHI  
SHORFAYAA-IIL WA BIHAQQI  
SYATHOTHLASYIN (2X)

BIQOTHI-HIISYIN (2X)

WABIHAQQIMAA LAWKHIL  
QUDROTI MAKTUUBUN AN  
TAWAKKALU BI ALUHAN (2X)

AL-AJAL (2X)

AS-SAA'AH (2X)

## Friday Jinn Ritual

"Oh great King of the Jinn Abu Hasan Zopa'ah (Aboo Hasan-Zo-ba-ha) I ask and demand of you that you send one of your Servant to bring me the lustful consort of my choosing, let her bring me excitement and pleasure at my calling."

Pass your jewelry through the incense as you look in the mirror.

"By the power of Aboo Hasan-Zo-ba-ha I bind you to this stone so that you will find the lover of my desire."

Look into the mirror and see if you can see an image of the Jinn that is assigned to you.

If you can't see it, ask for its name.

If you do not hear a name, simply refer to it as Jinn.

"You are bound by me, by this jewelry to do as I please."

Extinguish the candles and incense.

Carry the jewelry wherever you go until you feel you are satisfied with your results.

Jinn King Aboo Hasan-Zo-ba-ha

Planet: Venus Day: Friday

Angel:

Attributes:

Invocation:

AJIB YAA ZAWBA'AH BIHAQQIL MALIKIL  
MUWAKKILI 'ALAYKA 'ANYAA-IIL ALLADZII  
TASARRO-A FII KHIDMATIH WA BIHAQQI  
DAMWIYYIN (2X)

AYIIHIN (2X)

BISYALMAYIN (2X)

JARHAMALATHIN (2X)

SUBBUUHUN QUDDUUSUN ROBBUL  
MALAA-IKATU WAR RUUH IN LAM TA-ATI  
YAA ABYADH 'ARRODHTUKA 'ALAN NAARI  
AJIB WA ASRI' WA TAWAKKALU BI  
ALUHHAN (2X)

AL-AJAL (2X)

AS-SAA'AH (2X)

Balabolka  
Audacity  
OpenShot Video Editor

17,500.0 Hz

19,000.0 Hz

Theta waves 4-7 Hz  
5-8 Hz

6 Hz

Vivid-holograph-like images

432 Hz - miracle frequency for manifesting

528 Hz - positive vibes and uplifted mood/trauma

Solfeggio frequencies

963 Hz - manifest money

417 Hz - clear your mind and negative energy

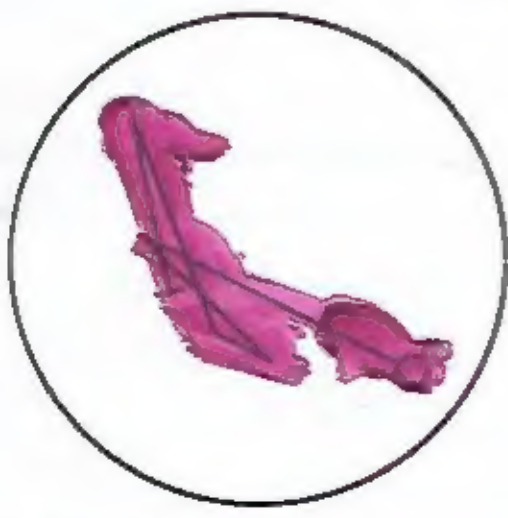
639 Hz - manifest love, relationships and

~~396~~ 741 Hz - sadness into joy attraction

741 Hz - develop self expression, powerful creativity

852 Hz - spirituality













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